Periodical
QD
271
.J6
Index
v.201-210

ISSN 0021-9673

UBLISHED
EEKLY

CUMULATIVE AUTHOR AND SUBJECT INDEXES VOLUMES 201–210

Supplied free of charge to the 1981 subscribers of the Journal of Chromatography

URNAL OF

CHROMATOGRAPHY

TERNATIONAL JOURNAL ON CHROMATOGRAPHY, ELECTROPHORESIS AND RELATED METHODS

EDITOR, Michael Lederer (Switzerland)

ASSOCIATE EDITOR, K. Macek (Prague)

EDITORIAL BOARD
W. A. Aue (Halifax)
V. G. Berezkin (Moscow)
V. Betina (Bratislava)
A. Bevenue (Honolulu, HI)
P. Boulanger (Lille)
A. A. Boulton (Saskatoon)
G. P. Cartoni (Rome)
G. Duyckaerts (Liège)
L. Fishbein (Jefferson, AR)
A. Frigerio (Milan)
C. W. Gehrke (Columbia, MO)
E. Gil-Av (Rehovot)
G. Guiochon (Palaiseau)
I. M. Hais (Hradec Králové)
J. K. Haken (Kensington)
E. Heftmann (Berkeley, CA)
S. Hjertén (Uppsala)
E. C. Horning (Houston, TX)
Cs. Horváth (New Haven, CT)
J. F. K. Huber (Vienna)
A. T. James (Sharnbrook)
J. Janák (Brno)
E.sz. Kováts (Lausanne)
K. A. Kraus (Oak Ridge, TN)
E. Lederer (Gif-sur-Yvette)
A. Liberti (Rome)
H. M. McNair (Blacksburg, VA)
Y. Marcus (Jerusalem)
G. B. Marini-Bettòlo (Rome)
Č. Michalec (Prague)
R. Neher (Basel)
G. Nickless (Bristol)
J. Novák (Brno)
N. A. Parris (Wilmington, DE)
P. G. Righetti (Milan)
O. Samuelson (Göteborg)
G.-M. Schwab (Munich)
G. Semenza (Zürich)
L. R. Snyder (Tarrytown, NY)
A. Zlatkis (Houston, TX)

EDITORS, BIBLIOGRAPHY SECTION
K. Macek (Prague), J. Janák (Brno), Z. Deyl (Prague)

COORD. EDITOR, DATA SECTION
J. Gasparič (Hradec Králové)

ELSEVIER SCIENTIFIC PUBLISHING COMPANY
AMSTERDAM

FEB 10 11 45 AM '82

UNIVERSITY OF HAWAII
LIBRARY

PERIODICAL
QD271
J6
Index
v.201-210
U.H. LIBRARY

JOURNAL OF CHROMATOGRAPHY

Scope. The *Journal of Chromatography* publishes papers on all aspects of chromatography, electrophoresis and related methods. Contributions consist mainly of research papers dealing with chromatographic theory, instrumental development and their applications. The section *Biomedical Applications*, which is under separate editorship, deals with the following aspects: developments in and applications of chromatographic and electrophoretic techniques related to clinical diagnosis (including the publication of normal values); screening and profiling procedures with special reference to metabolic disorders; results from basic medical research with direct consequences in clinical practice; combinations of chromatographic and electrophoretic methods with other physicochemical techniques such as mass spectrometry. In *Chromatographic Reviews*, reviews on all aspects of chromatography, electrophoresis and related methods are published.

Submission of Papers. Papers in English, French and German may be submitted, in three copies. Manuscripts should be submitted to: The Editor of *Journal of Chromatography*, P.O. Box 681, 1000 AR Amsterdam, The Netherlands, or to: The Editor of *Journal of Chromatography, Biomedical Applications*, P.O. Box 681, 1000 AR Amsterdam, The Netherlands. Reviews are invited or proposed by letter to the Editors and will appear in *Chromatographic Reviews* or *Biomedical Applications*. An outline of the proposed review should first be forwarded to the Editors for preliminary discussion prior to preparation. Submission of an article is understood to imply that the article is original and unpublished and is not being considered for publication elsewhere. For copyright regulations, see below.

Subscription Orders. Subscription orders should be sent to: Elsevier Scientific Publishing Company, P.O. Box 211, 1000 AE Amsterdam, The Netherlands. The *Journal of Chromatography* and the *Biomedical Applications* section can be subscribed to separately.

Publication. The *Journal of Chromatography* (incl. *Biomedical Applications*, *Chromatographic Reviews* and *Cumulative Author and Subject Indexes*, *Vols. 201–210* and *211–220*) has 24 volumes in 1981. The subscription prices for 1981 are:

J. Chromatogr. (incl. *Chromatogr. Rev.* and *Cum. Indexes*) + *Biomed. Appl.* (Vols. 203–226):
Dfl. 3240.00 plus Dfl. 432.00 (postage) (total *ca.* US$ 1708.00)

J. Chromatogr. (incl. *Chromatogr. Rev.* and *Cum. Indexes*) only (Vols. 203–220):
Dfl. 2556.00 plus Dfl. 324.00 (postage) (total *ca.* US$ 1339.50).

Biomed. Appl. only (Vols. 221–226):
Dfl. 852.00 plus Dfl. 108.00 (postage) (total *ca.* US$ 446.50).

Journals are automatically sent by air mail to the U.S.A. and Canada at no extra costs, and to Japan, Australia and New Zealand with a small additional postal charge. Back volumes of the *Journal of Chromatography* (Vols. 1 through 202) are available at Dfl. 156.00 (plus postage). Claims for issues not received should be made within three months of publication of the issue. If not, they cannot be honoured free of charge. For customers in the U.S.A. and Canada wishing additional bibliographic information on this and other Elsevier journals, please contact Elsevier/North-Holland Inc., Journal Information Centre, 52 Vanderbilt Avenue, New York, NY 10164. Tel: (212) 867-9040.

Abstracts/Contents Lists published in Analytical Abstracts, Biochemical Abstracts, Biological Abstracts, Chemical Abstracts, Chemical Titles, Current Contents/Physical, Chemical & Earth Sciences, Current Contents/Life Sciences, Index Medicus, and Science Citation Index.

See page 3 of cover for Publication Schedule, Information for Authors, and information on the News Section and Advertisements.

© ELSEVIER SCIENTIFIC PUBLISHING COMPANY — 1981

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the publisher, Elsevier Scientific Publishing Company, P.O. Box 330, 1000 AH Amsterdam, The Netherlands.

Submission of an article for publication implies the transfer of the copyright from the author(s) to the publisher and entails the authors' irrevocable and exclusive authorization of the publisher to collect any sums or considerations for copying or reproduction payable by third parties (as mentioned in article 17 paragraph 2 of the Dutch Copyright Act of 1912 and in the Royal Decree of June 20, 1974 (S. 351) pursuant to article 16 b of the Dutch Copyright Act of 1912) and/or to act in or out of Court in connection therewith.

Special regulations for readers in the U.S.A. This journal has been registered with the Copyright Clearance Center, Inc. Consent is given for copying of articles for personal or internal use, or for the personal use of specific clients. This consent is given on the condition that the copier pays through the Center the per-copy fee stated in the code on the first page of each article for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. The appropriate fee should be forwarded with a copy of the first page of the article to the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970, U.S.A. If no code appears in an article, the author has not given broad consent to copy and permission to copy must be obtained directly from the author. All articles published prior to 1980 may be copied for a per-copy fee of US$ 2.25, also payable through the Center. This consent does not extend to other kinds of copying, such as for general distribution, resale, advertising and promotion purposes, or for creating new collective works. Special written permission must be obtained from the publisher for such copying.

Special regulations for authors in the U.S.A. Upon acceptance of an article by the journal, the author(s) will be asked to transfer copyright of the article to the publisher. This transfer will ensure the widest possible dissemination of information under the U.S. Copyright Law.

Printed in The Netherlands

JOURNAL *of* CHROMATOGRAPHY

INTERNATIONAL JOURNAL ON CHROMATOGRAPHY, ELECTROPHORESIS AND RELATED METHODS

Cumulative Author and Subject Indexes Volumes 201–210 (1980–1981)

ELSEVIER SCIENTIFIC PUBLISHING COMPANY
AMSTERDAM
1981

Electronic data processing:
Büro für Satztechnik W. Meyer KG
Hanau, G.F.R.

© ELSEVIER SCIENTIFIC PUBLISHING COMPANY — 1981

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the publisher, Elsevier Scientific Publishing Company, P.O. Box 330, 1000 AH Amsterdam, The Netherlands.

Submission of an article for publication implies the transfer of the copyright from the author(s) to the publisher and entails the authors' irrevocable and exclusive authorization of the publisher to collect any sums or considerations for copying or reproduction payable by third parties (as mentioned in article 17 paragraph 2 of the Dutch Copyright Act of 1912 and in the Royal Decree of June 20, 1974 (S. 351) pursuant to article 16 b of the Dutch Copyright Act of 1912) and/or to act in or out of Court in connection therewith.

Special regulations for readers in the U.S.A. This journal has been registered with the Copyright Clearance Center, Inc. Consent is given for copying of articles for personal or internal use, or for the personal use of specific clients. This consent is given on the condition that the copier pays through the Center the per-copy fee stated in the code on the first page of each article for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. The appropriate fee should be forwarded with a copy of the first page of the article to the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970, U.S.A. If no code appears in an article, the author has not given broad consent to copy and permission to copy must be obtained directly from the author. All articles published prior to 1980 may be copied for a per-copy fee of US$ 2.25, also payable through the Center. This consent does not extend to other kinds of copying, such as for general distribution, resale, advertising and promotion purposes, or for creating new collective works. Special written permission must be obtained from the publisher for such copying.

Special regulations for authors in the U.S.A. Upon acceptance of an article by the journal, the author(s) will be asked to transfer copyright of the article to the publisher. This transfer will ensure the widest possible dissemination of information under the U.S. Copyright Law.

Printed in The Netherlands

AUTHOR INDEX

VOLUMES 201—210

The volume number is placed in parentheses before the page number

A

Abou-Donia, M.B., see Abou-Donia, S.A. (206) 606

Abou-Donia, S.A., Lasker, J.M. and Abou-Donia, M.B.
HPLC analysis of gossypol (206) 606

Abraham, M.H., Huq, D., Koenigsberger, R.U. and Rose, J.B.
GLC of the isomers of dichlorobenzophenone, di(chlorophenyl)methane and 1,1-di(chlorophenyl)ethane (206) 147

Acamovic, T. and D'Mello, J.P.F.
Determination of mimosine by ion-exchange chromatography (206) 416

A'Campo, C.P.M.G., Lemkowitz, S.M., Verbrugge, P. and Van den Berg, P.J.
GC determination of water: a source of systematic error introduced by interactions of polar compounds on porous polymer GC columns (203) 271

Acampora, A., see Nota, G. (207) 47

Ackermann, L., see Szepesy, L. (206) 611

Ageta, T., see Mikasa, H. (202) 504

Ahn, G.X., see Kraak, J.C. (209) 369

Aksamit, W., see Wester, R. (209) 463

Albaigés, J., Borbón, J. and Gassiot, M.
GC-MS identification of geochemically significant isoalkane hydrocarbons (204) 491

Alberti, G., Costantino, U. and Luciani Giovagnotti, M.L.
Ion-exchange properties of γ-titanium phosphate and its monosodium forms towards Mg^{2+} and Ca^{2+} ions (201) 175

Alboom, M. van, see Van Alboom, M. (205) 367

Albro, P.W., Corbett, J.T. and Schroeder, J.L.
Quantitative characterization of polychlorinated biphenyl mixtures (Aroclors 1248, 1254 and 1260) by GC using capillary columns (205) 103

Alexander, P.W., Haddad, P.R., Low, G.K.C. and Maitra, C.
Application of a copper tubular electrode as a potentiometric detector in the determination of amino acids by HPLC (209) 29

Alfredson, T.V., see Apffel, J.A. (206) 43

Ali, H.M. and Beckett, A.H.
Identification of a new metabolite after incubation of N-benzylaniline with rabbit liver microsomes (202) 287

Ali, H.M. and Beckett, A.H.
Identification of two *in vitro* metabolic products after liver microsomal incubation of antazoline (210) 350

Allen, C., see Schwartz, D.P. (208) 55

Allen, J.G. and Hall, K.J.
Rapid method for the determination of abscisic acid applied to apple leaves (205) 199

Alt, K.O. and Székely, G.
Combination of IR and TLC for the identification of slightly soluble substances (202) 151

Amano, T., Komiya, T., Hori, M., Goto, M., Kozuka, M. and Sawada, T.
Isolation and characterization of euglobals from *Eucalyptus globulus* Labill. by preparative reversed-phase LC (208) 347

Ambe, Y., see Yokouchi, Y. (209) 293

Amos, B., Marple, L., Smithers, J. and Matin, S.B.
Quantitative determination of naproxen in formulated rat feed by GC-MS and GC-flame-ionization detection (206) 151

Amos, R.
Evaluation of bonded phases for the HPLC determination of polycyclic aromatic hydrocarbons in effluent waters (204) 469

Amoscato, A.A., Babcock, G.F. and Nishioka, K.
Analysis of contaminants in commercial preparations of the tetrapeptide tuftsin by HPLC (205) 179

Amvam Zollo, P.H., see Dreux, M. (204) 207

Anders, M.W., see Swanson, A.R. (207) 365

Andersen, R.A., see Kemp, T.R. (209) 467

Anderson, R.E.
Estimation of ion-exchange process limits by selectivity calculations. II. Regeneration curves (201) 35

Andersson, B., see Sandberg, G. (205) 125

Andersson, I., see Jansson, S.O. (203) 93
Andrawes, F.F., Byers, T.B. and Gibson, E.K.
Effect of helium purity on the helium detector response in the saturation region of the detector field intensity (205) 419
Andrews, P., see Huggett, A. (209) 67
Andrews, P.A., see Nakazawa, H. (205) 482
Andronikashvili, T.G., see Gogitidze, N.M. (206) 239
Ansorge, W. and De Maeyer, L.
Thermally stabilized very thin (0.02-0.3 mm) polyacrylamide gels for electrophoresis (202) 45
Antonopoulos, C.A., see Hjerpe, A. (202) 453
Apffel, J.A., Alfredson, T.V. and Majors, R.E.
Automated on-line multi-dimensional HPLC techniques for the clean-up and analysis of water-soluble samples (206) 43
Arakawa, Y., Wada, O., Yu, T.H. and Iwai, H.
Rapid method for the determination of tetraalkyltin compounds in various kinds of biological material by GC (207) 237
Araki, T., see Kimura, Y. (206) 563
Arcus, A.C., McKinnon, A.E., Livesey, J.H., Metcalf, W.S., Vaughan, S. and Keey, R.B.
Continuous-flow, support-free, electrophoretic separation in thin layers: towards large-scale operation (202) 157
Arora, A.K., see Kohli, J.C. (210) 370
Arpino, P.J., Krien, P., Vajta, S. and Devant, G.
Optimization of the instrumental parameters of a combined liquid chromatograph-mass spectrometer, coupled by an interface for direct liquid introduction. II. Nebulization of liquids by diaphragms (203) 117
Arrendale, R.F., Severson, R.F. and Chortyk, O.T.
Preparation of wall-coated open tubular glass (Pyrex) capillary columns with polar stationary phases, using Superox™-4 as a surface pretreating and deactivating agent (208) 209
Arstila, A.U., see Räisänen, S. (208) 323
Arx, E. von, see Von Arx, E. (209) 310
Asai, K., see Ishida, Y. (204) 143
Audebert, R., see Boué, J. (204) 185
Aue, W.A. and Siu, K.W.M.
A d.c. electron-capture detector with separated ionization and capture regions (203) 237
Aue, W.A., see Siu, K.W.M. (210) 401
Aue, W.A., see Wickramanayake, P.P. (210) 133
Auer, M., see Kolb, B. (204) 371
Averin, V.A., see Sakodynskii, K.I. (204) 167
Ayyangar, N.R., Lugade, A.G., Sane, M.G. and Srinivasan, K.V.
Separation of 2-amino-3*H*-phenoxazin-3-one impurity from *o*-aminophenol (209) 113

B

Baba, M., see Kimura, Y. (206) 563
Babcock, G.F., see Amoscato, A.A. (205) 179
Bacaloni, A., see Devitofrancesco, G. (210) 261
Bachur, N.R., see Nakazawa, H. (205) 482
Badings, H.T., Van der Pol, J.J.G. and Wassink, J.G.
Preparation of wall-coated glass capillary columns after surface roughening by means of amorphous silica. II. Factors affecting the performance of the columns in GC analyses (203) 227
Bafna, S.L., Patel, M.B., Doshi, M.C. and Kazi, S.S.
Molecular sorption on ion-exchange resins of aliphatic mono- and dicarboxylic acids (201) 131
Bailey, D.L., see Seymour, M.D. (206) 301
Bailly, M. and Tondeur, D.
Thermal fractionation by moving-bed ion exchange: principles and experiments (201) 343
Bakker, J.A., Van den Brande, J.L. and Hoogerbrugge, C.M.
Evidence for carrier ampholyte-peptide interactions during somatomedin purification (209) 273
Ballabio, M., see Caccia, S. (210) 311
Ballard, K.E., see Corina, D.L. (210) 146
Ballschmiter, K., see Scholz, B. (208) 148, (208) 156
Bapat, B.V., see Naikwadi, K.P. (206) 361
Barazi, S. and Bonini, M.
Determination of eleven benzodiazepine derivatives in acetonic solution by GC using a nitrogen-specific detector. Comparison of five stationary phases (in French) (202) 473
Barciszewska, M., see Joachimiak, A. (206) 600
Barciszewski, J., see Joachimiak, A. (206) 600
Bardou, L., see L'Emeillat, Y. (206) 89
Barker, P.E., Hatt, B.W. and Holding, S.R.
Dissolution of silaceous chromatographic packings in various aqueous eluents (206) 27
Barker, P.E., Hatt, B.W. and Vlachogiannis, G.J.
Suitability of TSK-gel Toyopearl packing for the gel permeation chromatographic analysis of dextran (208) 74
Barkhan, P., see Haroon, Y. (206) 333
Barnes, J.A., see Kennedy, J.F. (205) 31
Barnett, R., see Haghighi, B. (206) 101
Barri, S.A.I. and Rees, L.V.C.
Binary and ternary cation exchange in zeolites (201) 21
Barry, B.W., see Güveli, D.E. (202) 323
Barth, H.G. and Smith, D.A.
High-performance size-exclusion chromatography of guar gum (206) 410
Bartha, Á., see Hlavay, J. (204) 59
Bartuska, V.J., see Maciel, G.E. (205) 438

Batterman, S., see Hendriks, H. (205) 444
Bauer, M., see Gentner, P.R. (206) 200
Bauer, P. and Richter, M.
Quantitative analysis of free amine in polyaminoamide and polyamine hardeners by means of gel permeation chromatography (in German) (206) 343
Baumgartner, E., see Leuenberger, U. (202) 461
Baust, J.G., see Hendrix, D.L. (210) 45
Bayer, E., see Frank, H. (207) 213
Beauchamp, R., Boinay, P., Fombon, J.-J., Tacussel, J., Breant, M., Georges, J., Porthault, M. and Vittori, O.
New electrochemical cell for HPLC (204) 123
Beckett, A.H., see Ali, H.M. (202) 287, (210) 350
Beeren, A.J.B., see Deelder, R.S. (203) 153
Behlau, H., see Schomburg, G. (203) 179
Békássy, S., see Vidal-Madjar, C. (203) 247
Belenkii, B.G., see Gankina, E.S. (208) 381
Belenkii, G.B., see Kever, J.J. (207) 145
Beliaev, V.M., see Gankina, E.S. (208) 381
Benecke, I., see König, W.A. (209) 91
Benoit, R.E., see Jessee, J.A. (207) 454
Berezkin, V.G., see Shmidel, Y.B. (202) 279
Berezkin, V.G., see Soják, L. (209) 15
Berg, P.J. van den, see Van den Berg, P.J. (203) 271
Berger, D. and Gilliard, B.
Design and applications of a microprocessor-controlled system to optimize preparative LC (210) 33
Bergot, B.J., Ratcliff, M. and Schooley, D.A.
Method for quantitative determination of the four known juvenile hormones in insect tissue using GC-MS (204) 231
Berkhoff, C.J., see Roseboom, H. (208) 331
Berlizov, J.S., see Macák, J. (209) 472
Berridge, J.C.
Optimisation of reversed-phase HPLC separations with the aid of a programmable calculator (202) 469
Berthou, F., Gourmelun, Y., Dreano, Y. and Friocourt, M.P.
Application of GC on glass capillary columns to the analysis of hydrocarbon pollutants from the Amoco Cadiz oil spill (203) 279
Berthou, F., see L'Emeillat, Y. (206) 89
Bertoni, G., Bruner, F., Liberti, A. and Perrino, C.
Some critical parameters in collection, recovery and GC analysis of organic pollutants in ambient air using light adsorbents (203) 263
Bessman, S.P., see Kaitaranta, J.K. (206) 327
Beug, M.W. and Bigwood, J.
Quantitative analysis of psilocybin and psilocin in *Psilocybe baeocystis* (Singer and Smith) by HPLC and by TLC (207) 379
Bhatnagar, R., see Ito, Y. (207) 171
Bianchetti, G., see Dubruc, C. (204) 335
Bible, R. Jr., see Wester, R. (209) 463
Bichet, N., see Morin, M. (210) 346
Bidleman, T.F., see Westcott, J.W. (210) 331
Bieganowska, M. and Soczewiński, E.
Retention parameters and eluent composition in TLC and HPLC of aromatic nitro compounds in reversed-phase systems (205) 451
Bigwood, J., see Beug, M.W. (207) 379
Bij, K.E., Horváth, C., Melander, W.R. and Nahum, A.
Surface silanols in silica-bonded hydrocarbonaceous stationary phases. II. Irregular retention behavior and effect of silanol masking (203) 65
Bijl, J., see Van Peteghem, C. (210) 113
Billiet, H.A.H., see Schoenmakers, P.J. (205) 13
Biondi, P., see Pietta, P. (210) 516
Birks, J.W., see Shoemaker, B. (209) 251
Bishop, C.A., Kitson, T.M., Harding, D.R.K. and Hancock, W.S.
Investigation of the isolation of a mixed disulphide, diethylthiocarbamoyl 2-pyridyl disulphide by analytical and preparative HPLC (208) 141
Björkqvist, B.
Separation and determination of aliphatic and aromatic amines by HPLC with UV detection (204) 109
Bläker, F., see Thorn, W. (210) 319
Blasius, E., Janzen, K.-P., Klein, W., Klotz, H., Nguyen, V.B., Nguyen-Tien, T., Pfeiffer, R., Scholten, G., Simon, H., Stockemer, H. and Toussaint, A.
Preparation, characterization and application of ion exchangers with cyclic polyether anchor groups (201) 147
Blass, K.G. and Ho, C.S.
Sensitive and highly reproducible quantitative fluorescent TLC visualization technique for lecithin and sphingomyelin (208) 170
Bleha, M., see Lukáš, J. (210) 255
Blomberg, L., Buijten, J., Markides, K. and Wännman, T.
Evaluation of bonded methylsilicone rubber as a stationary phase for glass capillary columns (208) 231
Blomberg, L., Markides, K. and Wännman, T.
Glass capillary columns for GC coated with non-extractable films of cyanosilicone rubbers (203) 217
Blume, D.E., see Saunders, J.A. (205) 147
Bocquet, J.F. and Pommier, C.
Liquid crystals as stationary phases in GLC. III. Thermodynamic measurements on decane-dihexyloxyazoxybenzene and decane-diheptyloxyazoxybenzene systems (205) 239
Bocquet, J.F. and Pommier, C.
Liquid crystals as stationary phases in GLC. IV. Thermodynamic measurements on benzene-dihexyloxyazoxybenzene, benzene-diheptyloxyazoxybenzene, carbon tetrachloride-dihexyloxyazoxybenzene and carbon tetrachloride-diheptyloxyazoxybenzene systems (205) 251
Bodily, K.C., see Klemm, L.H. (206) 372

Boehme, G., see Warner, B.D. (210) 419
Boeva, V.I., see Sakodynskii, K.I. (206) 233
Böhlen, P. and Kleeman, G.
Analytical and preparative mapping of complex peptide mixtures by reversed-phase HPLC (205) 65
Boila, R.J. and Milligan, L.P.
Effect of ammonium hydroxide concentration on the recoveries of amino acids during preparation for GLC (202) 283
Boinay, P., see Beauchamp, R. (204) 123
Bollet, C., Escalier, J.-C., Souteyrand, C., Caude, M. and Rosset, R.
Rapid separation of heavy petroleum products by HPLC (206) 289
Bond, E.J., see Dumas, T. (206) 384
Boneva, S., see Dimov, N. (206) 549
Bonini, M., see Barazi, S. (202) 473
Bonitati, J.
Sample applicator for granular gel slabs: effect of sample orientation on the sensitivity of detection in isoelectric focusing (206) 132
Borbón, J., see Albaigés, J. (204) 491
Borys, H.K. and Karler, R.
Post-column derivatization procedure for the colorimetric analysis of tissue cannabinoids separated by HPLC (205) 303
Bos, R., see Hendriks, H. (205) 444
Boschetti, E., Girot, P., Secheresse, J.P. and Saint Blancard, J.
Study of the molecular interaction between lysozyme and heparin and application in affinity chromatography (210) 469
Bosisio, A.B., Snyder, R.S. and Righetti, P.G.
Molecular weight distribution of carrier ampholytes for isoelectric focusing (209) 265
Boucherle, A., see Molko, D. (206) 493
Boué, J., Audebert, R. and Quivoron, C.
Direct resolution of α-amino acid enantiomers by ligand exchange: stereoselection mechanism on silica packings coated with a chiral polymer (204) 185
Bouriotis, V. and Dean, P.D.G.
Use of triazine dyes in the affinity chromatographic purification of alkaline phosphatase from calf intestine (206) 521
Bouriotis, V., Galpin, I.J. and Dean, P.D.G.
Applications of immobilised phenylboronic acids as supports for group-specific ligands in the affinity chromatography of enzymes (210) 267
Bousquet, B., see Garnier, J.P. (204) 225
Bowers, W.D., Parsons, M.L., Clement, R.E., Eiceman, G.A. and Karasek, F.W.
Trace impurities in solvents commonly used for GC analysis of environmental samples (206) 279
Bowers, W.D., Parsons, M.L., Clement, R.E. and Karasek, F.W.
Component loss during evaporation-reconstitution of organic environmental samples for GC analysis (207) 203
Bradley, W.A., see Hancock, W.S. (206) 59
Braithwaite, R.A., see Guinebault, P.R. (204) 329
Brande, J.L. van den, see Van den Brande, J.L. (209) 273
Braslavsky, S.E., Herbert, H.-J., Holzwarth, A.R. and Schaffner, K.
Phytochrome models. V. Chromatographic detection of solvent adducts of bilinoid pigments (205) 85
Braumann, T. and Grimme, L.H.
Determination of hydrophobic parameters for pyridazinone herbicides by liquid-liquid partition and reversed-phase HPLC (206) 7
Breant, M., see Beauchamp, R. (204) 123
Brechbühler, B., see Grob, K. (205) 1
Bredesen, J.E., Ellingsen, O.F. and Karlsen, J.
Rapid isothermal GLC determination of tricyclic antidepressants in serum with use of a nitrogen-selective detector (204) 361
Bressolle, F., see Siouffi, A.M. (209) 129
Brinkman, U.A.T., see Reddingius, R.J. (205) 77
Brinkman, U.A.T., see Scholten, A.H.M.T. (205) 229
Brinkman, U.A.T., see Werkhoven-Goewie, C.E. (203) 165
Bronckhorst, M., see Poppe, H. (204) 77
Brønstad, J.O., Dahl, B. and Schrøder, K.
Determination of 9,10-anthraquinone and a mixture of 9,10-dihydroxy-1,4-dihydroanthracene and 1,4,5,8-tetrahydroanthraquinone in pulping materials by HPLC (206) 392
Brooks, M.A., Hackman, M.R. and Mazzo, D.J.
Determination of amoxicillin by HPLC with amperometric detection (210) 531
Broquaire, M., see Guinebault, P.R. (204) 329
Brough, A.W.J., Hillman, D.E. and Perry, R.W.
Capillary hydrodynamic chromatography: An investigation into operational characteristics (208) 175
Brown, J.N., Hewins, M., Van der Linden, J.H.M. and Lynch, R.J.
Solvent degassing and other factors affecting LC detector stability (204) 115
Brugman, W.J.T. and Kraak, J.C.
Separation of sulphonic acids by normal-phase LC using crown ethers in the mobile phase (205) 170
Bruner, F., see Bertoni, G. (203) 263
Bruner, F., see Crescentini, G. (204) 445
Brunnemann, K.D. and Posset, L.
Routine HPLC method for assessing sorbate in tobacco (202) 494
Brunner, G., see Holloway, C.J. (202) 423
Brusa, F., see Fini, O. (210) 326
Bruvier, C., Leroy, Y., Montreuil, J., Fournet, B and Kamerling, J.P.
GLC and MS of methyl ethers of methyl N-acetyl-N-methyl-β-D-neuraminate methyl glycoside (210) 487
Budevsky, O.B., see Pashankov, P.P. (209) 149
Buhler, D.R., see Ramsdell, H.S. (210) 154
Buijs, A. and Wesselingh, J.A.
Batch fluidized ion-exchange column for

streams containing suspended particles (201) 319
Buijten, J., see Blomberg, L. (208) 231
Bull, R.V.A., see Lim, C.K. (204) 219
Burton, K.W., see Szabadka, Ö. (201) 67
Buryan, P., see Macák, J. (209) 472
Butterfield, R.O., see Payne-Wahl, K. (209) 61
Byers, T.B., see Andrawes, F.F. (205) 419
Byvoet, P.
Analysis of radiomethylated N^{ε}-methyllysines and other methylated amino acids by ion-exchange chromatography with fluorescent detection (205) 478

C

Cabanetos-Queignec, M., see Queignec, R. (209) 345
Cabicar, J., see Štamberg, K. (201) 113
Caccia, S., Ballabio, M., Fanelli, R., Guiso, G. and Zanini, M.G.
Determination of plasma and brain concentrations of trazodone and its metabolite, 1-*m*-chlorophenylpiperazine, by GLC (210) 311
Campillo, A.J., see Lin, H.B. (206) 205
Capaccioli, T., see Di Pasquale, G. (206) 589
Capra, J.D., see Hancock, W.S. (206) 59
Caqueret, H., see Dubruc, C. (204) 335
Carignan, G., Lodge, B.A. and Skakum, W.
Analysis of testolactone and its formulations by HPLC (206) 174
Cartoni, G.P., Ciardi, M., Giarrusso, A. and Rosati, F.
Reversed-phase HPLC detection of pemoline in doping control (202) 131
Carver, R.A., see Sonobe, H. (210) 356
Cash, D.J.
Exclusion chromatography of anionic dyes. Anomalous elution peaks due to reversible aggregation (209) 405
Castagnola, M., see Mora de Gonzalez, N. (209) 421
Castilho, P. del, see Del Castilho, P. (204) 319
Catenacci, E., see Pietta, P. (210) 149
Caude, M., see Bollet, C. (206) 289
Caude, M., see Gareil, P. (208) 365
Caude, M., see Hennion, M.C. (210) 211
Caude, M., see Sudraud, G. (204) 397
Čechová, D., see Štrop, P. (207) 55
Černý, M., see Komers, R. (207) 345
Chambon, P., see Morin, M. (210) 346
Chambon, R., see Morin, M. (210) 346
Chang, S.-C., Charles, R. and Gil-Av, E.
Chiral recognition in GC by diamide-diamide solute-solvent interaction (202) 247
Charles, R., see Chang, S.-C. (202) 247
Charlionet, R., Morcamp, C., Sesboüé, R. and Martin, J.P.
Limiting factors for the resolving power of isoelectric focusing in natural pH gradients (205) 355
Charpentier, B.A. and Cowles, J.R.
Rapid method of analyzing phenolic compounds in *Pinus elliotti* using HPLC (208) 132
Chauvette, G., see Tancrède, P. (207) 387
Chaves das Neves, H.J., see Frank, H. (207) 213
Cheetham, N.W.H. and Sirimanne, P.
HPLC separation of methyl glycosides (208) 100
Cheetham, N.W.H., Sirimanne, P. and Day, W.R.
HPLC separation of carbohydrate oligomers (207) 439
Chen, A.C. and Mayer, R.T.
Fluorescamine as a tool for amino sugar analysis (207) 445
Chen, H.-H.Y., see Chen, S.S.-H. (208) 339
Chen, K.S., see Reich, T. (206) 139
Chen, S.S. and Hsu, D.-S.
Determination of 5'-nucleotidase by automated ion-exchange column chromatography (210) 186
Chen, S.S.-H., Kou, A.Y. and Chen, H.-H.Y.
Measurement of ethanolamine- and serine-containing phospholipids by HPLC with fluorescence detection of their Dns derivatives (208) 339
Chesler, S.N., see Guenther, F.R. (207) 256
Chiavari, G. and Giumanini, A.G.
GC analysis of aromatic amines as N-permethylated derivatives (206) 555
Chibata, I., see Watanabe, T. (207) 13
Chiesa, L., see Fini, O. (210) 326
Chlenov, M.A., see Zaslavsky, B.Y. (202) 63
Chortyk, O.T., see Arrendale, R.F. (208) 209
Chrétien, J.R., Dubois, J.-E., Hirsch, R.F. and Gaydosh, R.J.
GSC on cation-exchange resins. DARC topological analysis of the behavior of alkenes on nickel ions (207) 115
Christiansen, A.L., Rasmussen, K.E. and Tønnesen, F.
Determination of psilocybin in *Psilocybe semilanceata* using HPLC on a silica column (210) 163
Ciardi, M., see Cartoni, G.P. (202) 131
Ciccioli, P., Tappa, R., Di Corcia, A. and Liberti, A.
Graphitized carbon black columns for HPLC (206) 35
Clandinin, M.T., see Innis, S.M. (205) 490
Clark, B.C. Jr., see Jones, B.B. (202) 127
Classon, B., see Hjerpe, A. (202) 453
Clement, R.E., see Bowers, W.D. (206) 279, (207) 203
Cohen, J.D., see Epstein, E. (209) 413
Colin, J.M., Vion, G., Lamotte, M. and Joussot-Dubien, J.
Quantitative trace analysis of polycyclic aromatic hydrocarbons by HPLC and low-

temperature fluorimetry in Shpolskii matrices at 4.2°K. Application to medicinal white oils (204) 135
Combellas, C., see Hennion, M.C. (210) 211
Conacher, H.B.S., see Lawrence, J.F. (210) 168
Conlon, R.D., see Poile, A.F. (204) 149
Connor, J.
The electron-capture detector. II. Design and performance (210) 193
Corbett, J.T., see Albro, P.W. (205) 103
Corcia, A. di, see Di Corcia, A. (204) 255, (206) 35
Corina, D.L., Ballard, K.E. and Isaac, K.
Further calibration data for the GC of benzyl esters (210) 146
Corradini, D., see Messina, A. (207) 152
Costantino, U., Szirtes, L. and Környei, J.
Self-diffusion of the sodium ion in the monosodium and disodium forms of α- and γ-zirconium phosphate (201) 167
Costantino, U., see Alberti, G. (201) 175
Coughlan, S.J., see Gorham, J. (210) 550
Coustard, J.M., see Sudraud, G. (204) 397
Cowles, J.R., see Charpentier, B.A. (208) 132
Cradock, J.C., see Flora, K.P. (206) 117
Cramers, C.A., Scherpenzeel, G.J. and Leclercq, P.A.
Increased speed of analysis in directly coupled GC-MS systems. Capillary columns at sub-atmospheric outlet pressures (203) 207
Creamer, L.K. and Matheson, A.R.
Separation of bovine caseins using hydrophobic interaction chromatography (210) 105
Crescentini, G., Mangani, F., Mastrogiacomo, A.R. and Bruner, F.
Calibration method for the GC analysis of halocarbons in atmospheric samples using permeation tubes and an electron-capture detector (204) 445
Csárnyi, Á.H., Vajda, M. and Sági, J.
Separation of 5-alkyluracils and purine bases in hydrolysates of enzymatically synthesized nucleic acids by ion-pair HPLC (204) 213
Csövári, M., Erdélyi, M., Czeglédi, B., Nagy, G. and Fekete, L.
Study of sorption of uranium from pulps of low acidity (201) 371
Cvengrošová, Z., see Pechál, M. (206) 541
Czeglédi, B., see Csövári, M. (201) 371
Czerwinski, W., Wiejcka, M., Malikowska, H. and Dyjas, S.
GC analysis of impurities in caprolactam (208) 27

D

Dahl, B., see Brønstad, J.O. (206) 392
Dalene, M., Mathiasson, L. and Jönsson, J.Å.
Trace analysis of free amines by GLC (207) 37
Damme, J.-C. van, see Van Damme, J.-C. (206) 125
Darvas, F., see János, É. (202) 122
Das, A.K., see Dutta, J. (210) 544
Das, H.P., see Mahapatra, G.N. (210) 188
Dasare, B.D., see Dobrevsky, I. (201) 377
Davankov, V.A., see Zolotarev, Y.A. (207) 63, (207) 231
Davies, J.E., Grzeskowiak, R. and Mendham, J.
Determination of phosphorus in simple steels using ion-exchange chromatography (201) 305
Davignon, J.P., see Flora, K.P. (206) 117
Davis, P.J., see Klein, A.E. (207) 247
Davydov, V.Y., Gonzalez, M.E. and Kiselev, A.V.
HPLC of cardiac glycosides (204) 293
Dawkins, J.V. and Yeadon, G.
High-performance gel permeation chromatography with silica microspheres: mass-transfer dispersion and polydispersity of polystyrene (206) 215
Day, J.L., Maybaum, J. and Sadée, W.
Determination of 5-fluoro-2'-deoxyuridine[6-^{3}H] as an impurity in 5-fluorouracil[6-^{3}H] by HPLC (206) 407
Day, W.R., see Cheetham, N.W.H. (207) 439
De Galan, L., see Schoenmakers, P.J. (205) 13
De Jong, A.W.J., Poppe, H. and Kraak, J.C.
Column loadability and particle size in preparative LC (209) 432
De Jong, G.J., see Reddingius, R.J. (205) 77
De Jong, H.J., see Janssen, H.J.L. (202) 223
De Leeuw, J.W., see Klok, J. (207) 273
De Ligny, C.L., see Gelsema, W.J. (209) 363
De Maeyer, L., see Ansorge, W. (202) 45
Dean, P.D.G., see Bouriotis, V. (206) 521, (210) 267
Deans, D.R.
Use of heart cutting in GC: a review (203) 19
Debackere, M., see Delbeke, F.T. (206) 594
Deelder, R.S., Linssen, H.A.J., Koen, J.G. and Beeren, A.J.B.
A potentiometric membrane cell as a detector in LC (203) 153
Del Castilho, P., see Fekete, J. (204) 319
Delbeke, F.T., Debackere, M. and Desmet, N.
Detection of some local anaesthetics in horse urine and plasma by GLC (206) 594
Deming, S.N., see Stranahan, J.J. (202) 233
Derbyshire, R., see Molko, D. (206) 493
Desideri, P.G., see Lepri, L. (207) 29, (207) 412, (209) 312
Desmet, N., see Delbeke, F.T. (206) 594
Devant, G., see Arpino, P.J. (203) 117

Devitofrancesco, G., Furnari, C., Bacaloni, A. and Petronio, B.M.
Recovery of vapours from solid adsorbents (210) 261
Dhont, J.H.
The R_F value as a constant in TLC (202) 15
Di Corcia, A., Liberti, A. and Severini, C.
Acid-washed graphitized carbon black and its application in the separation of some acids (204) 255
Di Corcia, A., see Ciccioli, P. (206) 35
Di Pasquale, G. and Capaccioli, T.
Oxygen doping of carrier gas in the determination of dichloromethane in liquid foodstuffs by headspace GC with electron-capture detection (206) 589
Dick, J., see Macrae, R. (210) 138
Dieterich, I., see Gentner, P.R. (206) 200
Dimov, N. and Boneva, S.
Separation and identification of 2-nitroalkanol-1 compounds by GC (206) 549
Dinan, L.N., Donnahey, P.L., Rees, H.H. and Goodwin, T.W.
HPLC of ecdysteroids and their 3-epi, 3-dehydro and 26-hydroxy derivatives (205) 139
D'Mello, J.P.F., see Acamovic, T. (206) 416
Dobrevsky, I., Zvezdov, A., Dasare, B.D. and Prajapati, M.N.
Possibility for selective removal of calcium ions from Black Sea water using the continuous counter-current ion-exchange softening process with Wofatit KS-10 (201) 377
Doctor, V.M., see Green, C. (207) 268
Dodds, J.A., see Grevillot, G. (201) 329
Doi, T., see Ôi, N. (202) 305, (206) 143, (207) 252, (208) 404
Dolan, J.W., see Snyder, L.R. (203) 3
Doležal, B., Popl, M. and Holub, R.
Determination of activity coefficients at very low concentrations by the inert gas stripping method (207) 193
Donike, M. and Zimmermann, J.
Preparation of trimethylsilyl-, triethylsilyl- and *tert.*-butyldimethylsilyl enol ethers of ketosteroids for GC and MS analysis (in German) (202) 483
Donnahey, P.L., see Dinan, L.N. (205) 139
Dose, K., see Schmidt, R. (207) 435
Doshi, M.C., see Bafna, S.L. (201) 131
Doshi, P.S. and Edwards, D.J.
Effects of L-DOPA on dopamine and norepinephrine concentrations in rat brain assessed by GC (210) 505
Dostovalov, I.N., see Zolotarev, Y.A. (207) 231
Douse, J.M.F.
Trace analysis of explosives at the low picogram level by silica capillary column GLC with electron-capture detection (208) 83
Dovbush, T.I., see Korol, A.N. (209) 21
Draffehn, J., Schönecker, B. and Ponsold, K.
Reversed-phase TLC of steroids. I. Measurement and interpretation of R_M values (in German) (205) 113
Drake, A.F., Gould, J.M. and Mason, S.F.
Simultaneous monitoring of light-absorption and optical activity in the LC of chiral substances (202) 239
Dreano, Y., see Berthou, F. (203) 279
Dreux, C., see Garnier, J.P. (204) 225
Dreux, M., Lafosse, M., Amvam Zollo, P.H., Pougny, J.R. and Sinaÿ, P.
Synthesis of glycosides. Direct HPLC determination of intermediate perbenzylated anomers (in French) (204) 207
Drozd, J., see Novák, J. (204) 421
Drucker, D.B.
Wall-coated open-tubular capillary column system for GC analysis of neutral and acidic fermentation end-products (208) 279
D'Souza, F.C., see Kurhekar, M.P. (209) 101
Duang, E., see Finley, J.W. (207) 449
Dubois, J.-E., see Chrétien, J.R. (207) 115
Dubruc, C., Caqueret, H. and Bianchetti, G.
Determination of vincamine in human plasma using automated HPLC (204) 335
Dubský, H., see Rittich, B. (209) 7
Dülme, W., see Maasfeld, W. (204) 461
Dumas, T. and Bond, E.J.
Method of trapping low levels of phosphine at ambient temperature for GC analysis (206) 384
Dunberg, A., see Sandberg, G. (205) 125
Duszczyk, K., see Kemula, W. (204) 23
Dutt, M.C. and Teo, T.P.
Identification of basic drugs by the TLC profiles of their ninhydrin complexes (206) 267
Dutta, J., Das, A.K. and Ghosh, R.
Enzymatic reactions on TLC plates. III. Phospholipase C hydrolysis of phosphatidylcholine and separation of the products on a single plate; an assay method for the enzyme (210) 544
Dyjas, S., see Czerwinski, W. (208) 27

E

Ecknig, W., Metzner, K., Nehls, I. and Stanke, Z.
Group separation by reversed-phase HPLC. Rapid determination of remaining alkanes in alkanols (204) 29
Edlén, B., see Wahlund, K.-G. (204) 269
Edlund, P.O.
Determination of opiates in biological samples by glass capillary GC with electron-capture detection (206) 109
Edmonds, J., see Vedvick, T.S. (209) 451

Edwards, D.J., see Doshi, P.S. (210) 505
Egashira, S.
Potentiometric detector with a glass electrode for the ion-exchange chromatography of carboxylic acids (202) 37
Eiceman, G.A. and Karasek, F.W.
Identification of residual organic compounds in food packages (210) 93
Eiceman, G.A., see Bowers, W.D. (206) 279
Einarsson, R. and Moberg, U.
Isotachophoretic characterization of stinging insect venoms (209) 121
Ekqvist, B., see Eksborg, S. (209) 161
Eksborg, S.
Reversed-phase ion-pair chromatography of tetracyclines on a LiChrosorb NH_2 column (208) 78
Eksborg, S. and Ekqvist, B.
Reversed-phase ion-pair LC of tetracyclines (209) 161
Elchami, A.A., see Vanhaelen, M. (209) 476
Elekes, I., see Tomori, E. (204) 355
Elema, E.T., see Jellema, R. (210) 121
Ellingsen, O.F., see Bredesen, J.E. (204) 361
Elliott, W.H., see Shaw, R. (202) 347
Elrod, L. Jr., White, L.B. and Wong, C.F.
Determination of fortimicin A sulfate by HPLC after derivatization with 2,4-dinitrofluorobenzene (208) 357
Elvidge, J.A., see Marton, A. (201) 79
Endo, Y.
Simple method for the simultaneous determination of histamine, polyamines and histone H1 (205) 155
Engel, G.
Quantitative UV densitometric and fluoro-densitometric analysis of mycophenolic acid on thin-layer plates (in German) (207) 430
Engfeldt, B., see Hjerpe, A. (202) 453
Epstein, E. and Cohen, J.D.
Microscale preparation of pentafluoro-benzyl esters. Electron-capture GC detection of indole-3-acetic acid from plants (209) 413
Erdélyi, M., see Csövári, M. (201) 371
Erdélyi, M., see Novák, G. (201) 313
Eriksson, E.
Hydrophobic affinity partition of liposomes in aqueous two-phase systems (205) 189
Erni, F., Keller, H.P., Morin, C. and Schmitt, M.
Application of column switching in HPLC to on-line sample preparation for complex separations (204) 65
Escalier, J.-C., see Bollet, C. (206) 289
Eto, S., see Zaitsu, K. (206) 621
Evans, M.B., see Munro, G. (204) 201
Excoffier, J.-L., see Vidal-Madjar, C. (203) 247

F

Fall, R.R., see Giuliano, K.A. (202) 447
Fall, R.R., see Lau, E.P. (205) 213
Fanelli, R., see Caccia, S. (210) 311
Farstad, M., see Ingebretsen, O.C. (202) 439, (210) 522
Fehsenfeld, F.C., see Kuster, W.C. (205) 271
Feinberg, A.
Separation of 2-fluoro-2-deoxyarabino-furanosylpyrimidine nucleosides by HPLC (210) 527
Feistenauer, E., see Kuss, H.J. (204) 349
Fekete, J., Del Castilho, P. and Kraak, J.C.
Reversed-phase LC for the separation of chlorpromazine, imipramine and some of their metabolites (204) 319
Fekete, J., see Slaats, E.H. (207) 299
Fekete, L., see Csövári, M. (201) 371
Ferguson, D.A. and O'Brien, A.P.
Characterisation of "deasphaltened" petroleum residues by gel permeation chromatography (203) 313
Fiedler, H.-P.
Quantitation of nikkomycins in biological fluids by ion-pair reversed-phase HPLC (204) 313
Fiedler, H.-P.
Preparative-scale HPLC of ferricrocin, a microbial product (209) 103
Filonenko, G.V., Tertykh, V.A., Pavlov, V.V., Guba, G.Y. and Korol, A.N.
Comparison of supports chemically modified by organosilicon compounds for GLC (209) 385
Fini, O., Brusa, F. and Chiesa, L.
Evaluation of dead time in reversed-phase HPLC (in German) (210) 326
Finley, J.W. and Duang, E.
Resolution of ascorbic, dehydroascorbic and diketogulonic acids by paired-ion reversed-phase chromatography (207) 449
Flanagan, R.J., see Huggett, A. (209) 67
Flandrois, J.-P., see Ndulue, A. (209) 323
Fletcher, P. and Townsend, R.P.
Exchange of hydrated and amminated silver(I) ions in synthetic zeolites X, Y and mordenite (201) 93
Fletcher, S.M. and Hancock, V.S.
Potential errors in benzoylecgonine and cocaine analysis (206) 193
Flieger, M., Wurst, M., Stuchlík, J. and Reháček, Z.
Isolation and separation of new natural lactam alkaloids of ergot by HPLC (207) 139
Flora, K.P., Cradock, J.C. and Davignon, J.P.
Determination of Δ^9-tetrahydrocannabinol in pharmaceutical vehicles by HPLC (206) 117
Földiák, G., see Wojnárovits, L. (206) 511
Folestad, S. and Josefsson, B.
Chlorine-selective detector for LC (203) 173

Fombon, J.-J., see Beauchamp, R. (204) 123
Formentini, L., see Redaelli, C. (209) 110
Fournet, B., see Bruvier, C. (210) 487
Fraanje, J., see Kraak, J.C. (209) 369
Franich, R.A.
Determination of dothistromin by quantitative reversed-phase TLC (209) 117
Frank, H., Chaves das Neves, H.J. and Bayer, E.
GC of monosaccharides: formation of a single derivative for each aldose (207) 213
Frei, R.W., see Reddingius, R.J. (205) 77
Frei, R.W., see Scholten, A.H.M.T. (205) 229
Frei, R.W., see Werkhoven-Goewie, C.E. (203) 165
Friocourt, M.P., see Berthou, F. (203) 279
Frohlich, A.A., see Marquardt, R.R. (208) 373
Fudano, S., see Kudoh, M. (205) 473
Fujii, T., see Yokouchi, Y. (209) 293
Fujii, Y., Fukuda, H., Saito, Y. and Yamazaki, M.
Separation of digitalis glycosides by micro HPLC (202) 139
Fujita, T., see Ishida, Y. (204) 143
Fujitaki, J.M., see Steiner, A.W. (202) 263
Fukuda, H., see Fujii, Y. (202) 139
Fukui, E., see Kobayashi, K. (202) 93
Furnari, C., see Devitofrancesco, G. (210) 261
Furukawa, M. and Yokoyama, T.
Analysis of urea compounds by HPLC (208) 424
Fuwa, K., see Yokouchi, Y. (209) 293

G

Gabler-Kolacsek, I., see Jurenitsch, J. (210) 337
Gad Kariem, E.A., see Omer, A.I.H. (205) 486
Gaffney, J.S., see Lin, H.B. (206) 205
Galan, L. de, see De Galan, L. (205) 13
Galina, H. and Kolarz, B.N.
Acid-base properties of carboxylic cation exchangers (201) 51
Galli, M. and Trestianu, S.
Benefits of a special cooling system to improve precision and accuracy in non-vaporizing on-column injection procedures (203) 193
Galoux, M., see Van Damme, J.-C. (206) 125
Galpin, I.J., see Bouriotis, V. (210) 267
Games, D.E., Hirter, P., Kuhnz, W., Lewis, E., Weerasinghe, N.C.A. and Westwood, S.A.
Studies of combined LC-MS with a moving-belt interface (203) 131
Games, D.E., see Westwood, S.A. (204) 103
Gangwal, S.K.
GC investigation of raw wastewater from coal gasification (204) 439
Ganicheva, S.I., see Gankina, E.S. (208) 381
Gankina, E.S., Ganicheva, S.I., Beliaev, V.M., Kever, J.J. and Belenkii, B.G.
Gradient adsorption TLC of styrene-acrylonitrile random copolymers (208) 381
Gankina, E.S., see Kever, J.J. (207) 145
Gareil, P., Salinier, G., Caude, M. and Rosset, R.
Purification of a polyenic antibiotic by preparative LC (208) 365
Garnier, J.P., Bousquet, B. and Dreux, C.
Determination of 5-hydroxyindoleacetic acid in urine by HPLC: a fully automated method (204) 225
Gasc, J.C., see Lenfant, M. (206) 177
Gassiot, M., see Albaigés, J. (204) 491
Gauch, R., see Leuenberger, U. (202) 461
Gaudin, D., see Sudraud, G. (204) 397
Gauron, S., see Godbillon, J. (204) 303
Gaydosh, R.J., see Chrétien, J.R. (207) 115
Gazdag, M., see Hlavay, J. (204) 59
Gazdag, M., see Szepesi, G. (204) 341, (205) 57
Geiger, P.J., see Kaitaranta, J.K. (206) 327
Geigert, J., Hirano, D.S. and Moreland, M.
HPLC method for the analysis of alkene bromohydrins and iodohydrins (206) 625
Geigert, J., Hirano, D.S. and Neidleman, S.L.
HPLC method for the analysis of D-arabino-2-hexosulose (D-glucosone) (202) 319
Geigert, J., Hirano, D.S. and Neidleman, S.L.
HPLC method for the determination of L-ascorbic acid and D-isoascorbic acid (206) 396
Geigert, J., Panschar, B.M. and Neidleman, S.L.
GC methods for the analysis of the halohydrins of ethylene and propylene (205) 165
Gelpi, E., see Such, V. (209) 125
Gelpi, E., see Traveset, J. (204) 51
Gelsema, W.J., De Ligny, C.L., Roozen, A.M.P. and Wilms, G.P.
Optimal conditions for the coupling of aromatic amines to epoxy-activated Sepharose 6B (209) 363
Gentner, P.R., Bauer, M. and Dieterich, I.
TLC of phospholipids. Separation of major phospholipid classes of milk without previous isolation from total lipid extracts (206) 200
Georges, J., see Beauchamp, R. (204) 123
Gerasimenko, V.A., Kirilenko, A.V. and Nabivach, V.M.
Capillary GC of aromatic compounds found in coal tar fractions (208) 9
Gerberich, F.G., see Tshabalala, M.A. (207) 353
Ghaemi, Y., Knox, J.H. and Wall, R.A.
Hydrophobic chromatography with dynamically coated stationary phases. IV. Anionic surfactant effects on alumina (209) 191
Ghatge, B.B., see Naikwadi, K.P. (206) 361
Gholson, A., see Gilfoil, T.J. (210) 409
Ghosh, R., see Dutta, J. (210) 544
Giarrusso, A., see Cartoni, G.P. (202) 131
Gibson, E.K., see Andrawes, F.F. (205) 419

Gil-Av, E., see Chang, S.-C. (202) 247
Gilbert, J. and Startin, J.R.
Single-ion monitoring of styrene in foods by coupled MS-automatic headspace GC (205) 434
Gilbert, M.T., see Walker, I.C. (202) 491
Gilfoil, T.J., Gholson, A. and Hill, H.H. Jr.
Iodine-doped selective ionization detector for GC (210) 409
Gill, R., Stead, A.H. and Moffat, A.C.
Analytical aspects of barbiturate abuse. Identification of drugs by the effective combination of GLC, HPLC and TLC techniques (204) 275
Gilliard, B., see Berger, D. (210) 33
Gilon, C., Leshem, R. and Grushka, E.
Structure-resolution relationship. I. The effect of the alkylamide side-chain of aspartyl derivatives on the resolution of amino acid enantiomers (203) 365
Giovagnotti, M.L. Luciani, see Luciani Giovagnotti, M.L. (201) 175
Girot, P., see Boschetti, E. (210) 469
Giuliano, K.A., Lau, E.P. and Fall, R.R.
Simplified LC assay for epoxide hydrolase (202) 447
Giumanini, A.G., see Chiavari, G. (206) 555
Godbillon, J. and Gauron, S.
Determination of clomipramine or imipramine and their mono-demethylated metabolites in human blood or plasma by HPLC (204) 303
Godefroot, M., Sandra, P. and Verzele, M.
New method for quantitative essential oil analysis (203) 325
Godefroot, M., see Verzele, M. (205) 367
Godovskii, Y., see Sakodynskii, K.I. (206) 233
Goetz, H., see Unger, K. (202) 3
Goff, B. le, see Le Goff, B. (204) 385
Gogitidze, N.M., Andronikashvili, T.G., Litvak, Z., Panina, L.I., Sakodynskii, K.I. and Makarova, S.B.
Application of macroporous anion-exchange resins AN-221 and AN-211 as sorbents for GC (206) 239
Goldan, P.D., see Kuster, W.C. (205) 271
Goliáš, J., see Novák, J. (204) 421
Gonzalez, M.E., see Davydov, V.Y. (204) 293
Gonzalo, R., see Such, V. (209) 125
Gonzalo, R., see Traveset, J. (204) 51
Goodwin, T.W., see Dinan, L.N. (205) 139
Gorham, J., Coughlan, S.J., Storey, R. and Wyn Jones, R.G.
Estimation of quaternary ammonium and tertiary sulphonium compounds by thin-layer electrophoresis and scanning reflectance densitometry (210) 550
Goswami, S.K. and Kinsella, J.E.
Separation of prostaglandins A, B, D, E, F, thromboxane and 6-keto prostaglandin $F_{1\alpha}$ by TLC (209) 334
Goto, M., Koyanagi, Y. and Ishii, D.
Electrochemical detector for micro HPLC and its application to the determination of aminophenol isomers (208) 261
Goto, M., see Amano, T. (208) 347
Goto, S., see Kobayashi, H. (207) 281
Gould, J.M., see Drake, A.F. (202) 239
Gourmelun, Y., see Berthou, F. (203) 279
Grant, D.W. and Meiris, R.B.
Studies of the application of selective chromatographic and spectrofluorimetric techniques in the separation, characterization, and analysis of polycyclic aromatic hydrocarbons (203) 293
Grant, M.E., see Landis, J.B. (202) 99
Green, C., Doctor, V.M., Holzer, G. and Oró, J.
Separation of neutral and amino sugars by capillary GC (207) 268
Green, J.B.
LC on silica using mobile phases containing aliphatic carboxylic acids. I. Effects of carboxylic acid chain length on separation efficiency and selectivity (209) 211
Green, J.B. and Hoff, R.J.
LC on silica using mobile phases containing aliphatic carboxylic acids. II. Applications in fossil fuel characterization (209) 231
Green, J.D.
Direct sampling method for GC headspace analysis on glass capillary columns (210) 25
Greenberg, M.S., see Mayer, W.J. (208) 295
Grego, B., see Hearn, M.T.W. (203) 349
Grevillot, G., Dodds, J.A. and Marques, S.
Separation of silver-copper mixtures by ion-exchange parametric pumping. I. Total reflux separations (201) 329
Grimme, L.H., see Braumann, T. (206) 7
Grob, G., see Grob, K. (205) 1
Grob, K., Grob, G., Brechbühler, B. and Pichler, P.
Straightening of the ends of glass capillary columns (205) 1
Grob, K., see Grob, K. Jr. (207) 291
Grob, K. Jr.
Degradation of triglycerides in GC capillaries: studies by reversing the column (205) 289
Grob, K. Jr.
Evaluation of capillary GC for thermolabile phenylurea herbicides. Comparison of different columns including fused silica (208) 217
Grob, K. Jr. and Grob, K.
Evaluation of capillary columns by separation number or plate number (207) 291
Gross, B., see Moll, N. (206) 186
Grushka, E., see Gilon, C. (203) 365
Grzeskowiak, R., see Davies, J.E. (201) 305
Guba, G.Y., see Filonenko, G.V. (209) 385
Gübitz, G., Jellenz, W. and Santi, W.
Separation of the optical isomers of amino acids by ligand-exchange chromatography using chemically bonded chiral phases (203) 377
Guenther, F.R., Parris, R.M., Chesler, S.N. and Hilpert, L.R.

Determination of phenolic compounds in alternate fuel matrices (207) 256
Gugger, R.E., see Mozersky, S.M. (207) 395
Guinebault, P.R., Broquaire, M. and Braithwaite, R.A.
Determination of nifuroxazide in biological fluids by automated HPLC with large-volume injection (204) 329
Guiochon, G., see Siouffi, A. (209) 441
Guiochon, G., see Siouffi, A.M. (209) 129
Guiso, G., see Caccia, S. (210) 311
Gupta, A.R.
Thermal studies on the dehydration of polystyrene-divinylbenzene-type ion exchangers (205) 263
Gupta, R., see Kohli, J.C. (210) 370
Güveli, D.E. and Barry, B.W.
CC and TLC of cholic, deoxycholic and chenodeoxycholic bile acids and their sodium salts (202) 323
Guy, A., see Molko, D. (206) 493

H

Haastert, P.J.M. van, see Van Haastert, P.J.M. (210) 229, (210) 241
Hackman, M.R., see Brooks, M.A. (210) 531
Haddad, P.R., see Alexander, P.W. (209) 29
Haesen, G. and Le Goff, B.
Determination of phenolic plastic additives in edible oils by TLC (204) 385
Hagemann, R., see Sudraud, G. (204) 397
Haghighi, B., Thorpe, C., Pohland, A.E. and Barnett, R.
Development of a sensitive HPLC method for detection of aflatoxins in pistachio nuts (206) 101
Hajós, P. and Inczédy, J.
Simple method for the determination of low cation-exchange capacity and the titration of cation exchangers by constant-current coulometry (201) 193
Hajós, P. and Inczédy, J.
Preparation and ion chromatographic application of surface-sulphonated cation exchangers (201) 253
Hakl, J., see Tallová, J. (202) 487
Haklits, I., see Kiss, M. (201) 383
Hall, K.J., see Allen, J.G. (205) 199
Halsey, S.A., see Peppard, T.L. (202) 271
Hammond, E.W.
Quantitative chromatographic analysis of lipids in foods (203) 397
Hancock, V.S., see Fletcher, S.M. (206) 193
Hancock, W.S., Capra, J.D., Bradley, W.A. and Sparrow, J.T.
The use of reversed-phase HPLC with radial compression for the analysis of peptide and protein mixtures (206) 59
Hancock, W.S. and Sparrow, J.T.
Use of mixed-mode HPLC for the separation of peptide and protein mixtures (206) 71
Hancock, W.S., see Bishop, C.A. (208) 141
Handa, Y., Matano, K., Takauchi, K. and Tsukatani, H.
Sensitive GC determination of certain glycerophosphates by use of the flame photometric detector. Application to glycerophospholipids (206) 387
Hansen, S.H.
Column LC on dynamically modified silica. I (209) 203
Hansen, S.H., Helboe, P., Thomsen, M. and Lund, U.
HPLC on dynamically modified silica. II. Modification of various silica packings with cetyltrimethylammonium bromide (210) 453
Hansen, S.H. and Nordholm, L.
N-Alkylation of tertiary aliphatic amines by chloroform, dichloromethane and 1,2-dichloroethane (204) 97
Hansen, S.H. and Thomsen, M.
HPLC of idoxuridine and related substances on chemically bonded octadecylsilyl silica packings (209) 77
Hanson, V.L., Park, J.Y., Osborn, T.W. and Kiral, R.M.
HPLC analysis of egg yolk phospholipids (205) 393
Hansson, L. and Trojer, L.
Characterization of reversed-phase HPLC stationary phases by means of pyrolysis-GC (207) 1
Hara, S., see Oka, K. (202) 187
Harada, K., see Sugii, A. (206) 485
Haraguchi, K., Kai, M., Kohashi, K. and Ohkura, Y.
Fluorimetric assay for ornithine decarboxylase by HPLC (202) 107
Harden, R.C., Mallen, D.N.B., Osborne, D.J. and Smith, J.M.
Derivatisation and GLC of 3-aminomethyl-2-phenylbicyclo[2.2.2]octanes (206) 83
Hardin, J.M. and Stutte, C.A.
Analysis of plant hormones using HPLC (208) 124
Harding, D.R.K., see Bishop, C.A. (208) 141
Haroon, Y., Shearer, M.J. and Barkhan, P.
Resolution of menaquinones (vitamin K_2) by HPLC (206) 333
Harrington, G.W., see Veale, H.S. (208) 161
Hartwick, R.A., see Knox, J.H. (204) 3
Harvey, D.J., Leuschner, J.T.A. and Paton, W.D.M.
Measurement of Δ^1-tetrahydrocannabinol in plasma to the low picogram range by GC-MS using metastable ion detection (202) 83
Hashimoto, T., see Kato, Y. (205) 185, (206) 135, (208) 71
Haskó, F., see Jakab, M. (201) 281
Hatt, B.W., see Barker, P.E. (206) 27, (208) 74

Havlíček, L., see Štamberg, K. (201) 113
Hayes, A.W., see Reddy, C.S. (208) 17
Hearn, M.T.W. and Grego, B.
HPLC of amino acids, peptides and proteins. XXVII. Solvophobic considerations for the separation of unprotected peptides on chemically bonded hydrocarbonaceous stationary phases (203) 349
Heftmann, E., see Lin, J.-T. (207) 457
Heimler, D., see Lepri, L. (207) 29, (207) 412, (209) 312
Heisler, E.G., Siciliano, J., Kalan, E.B. and Osman, S.F.
HPLC determination of stress-induced sesquiterpenes of the potato (*Solanum tuberosum*) (210) 365
Helander, E.R., see Steiner, A.W. (202) 263
Helboe, P., see Hansen, S.H. (210) 453
Hellman, U., see Hjertén, S. (202) 391
Hendricks, A.C., see Jessee, J.A. (207) 454
Hendriks, H., Batterman, S., Bos, R., Huizing, H.J. and Malingré, T.M.
Use of Amberlite XAD-2 columns for the separation of cannabinoids from *Cannabis* extracts (205) 444
Hendrix, D.L., Lee, R.E. Jr., Baust, J.G. and James, H.
Separation of carbohydrates and polyols by a radially compressed HPLC silica column modified with tetraethylenepentamine (210) 45
Hennion, M.C., Picard, C., Combellas, C., Caude, M. and Rosset, R.
Simple relationships concerning mobile and stationary phases in normal- and reversed-phase chromatography (210) 211
Herbert, H.-J., see Braslavsky, S.E. (205) 85
Herbold, H.A., see Roseboom, H. (202) 431, (208) 137
Hermodson, M.A., see Pearson, J.D. (207) 325
Hewins, M., see Brown, J.N. (204) 115
Hidy, B., see Kirby, D.P. (203) 139
Hill, E.A. and Hsieh, K.
Halide exchange during GC (208) 388
Hill, H.H. Jr., see Gilfoil, T.J. (210) 409
Hillman, D.E., see Brough, A.W.J. (208) 175
Hilpert, L.R., see Guenther, F.R. (207) 256
Hiltunen, R., see Räisänen, S. (208) 323
Himmel, M.E. and Squire, P.G.
High-performance size exclusion chromatography of sea worm chlorocruorin and other large proteins, viruses and polysaccharides on a TSK G5000 PW preparative column (210) 443
Hinshaw, J.V. Jr., see Lochmüller, C.H. (202) 363
Hirai, Y., Yoza, N. and Ohashi, S.
Flow injection system as a post-column reaction detector for HPLC of phosphinate, phosphonate and orthophosphate (206) 501
Hirano, D.S., see Geigert, J. (202) 319, (206) 396, (206) 625
Hirsch, R.F., see Chrétien, J.R. (207) 115
Hirter, P., see Games, D.E. (203) 131
Hjerpe, A., Antonopoulos, C.A., Classon, B. and Engfeldt, B.
Separation and quantitative determination of galactosamine and glucosamine at the nanogram level by sulphonyl chloride reaction and HPLC (202) 453
Hjertén, S. and Hellman, U.
Chromatographic desalting, deproteinization and concentration of nucleic acids on columns of polytetrafluoroethylene (202) 391
Hlavay, J., Bartha, Á., Vigh, G., Gazdag, M. and Szepesi, G.
Use of Pluronic F68 glass capillary columns for the analysis of essential oil samples (204) 59
Ho, C.S., see Blass, K.G. (208) 170
Hobo, T., see Watabe, K. (206) 223
Hodgins, L.T. and Levy, M.
Affinity adsorbent preparation. Chemical features of agarose derivatization with trichloro-*s*-triazine (202) 381
Hoff, R.J., see Green, J.B. (209) 231
Holding, S.R., see Barker, P.E. (206) 27
Holler, J.S., Yert, L.W., Patterson, D.G., Smrek, A.L. and Needham, L.L.
Characterization of interferences in the analysis of serum for DDT and its metabolites (206) 617
Holloway, C.J., Tegtmeier, F., Brunner, G. and Trautschold, I.
GC method for the quantitative assay of alkane thiol S-methyltransferase (202) 423
Holmén, A., see Kinberger, B. (207) 148
Holotík, Š., see Pechál, M. (206) 541
Holub, R., see Doležal, B. (207) 193
Holzer, G., see Green, C. (207) 268
Holzwarth, A.R., see Braslavsky, S.E. (205) 85
Honda, S., Nagata, M. and Kakehi, K.
Rapid GC analysis of partially methylated aldoses as trimethylsilylated diethyl dithioacetals (209) 299
Hoogerbrugge, C.M., see Bakker, J.A. (209) 273
Hori, M., see Amano, T. (208) 347
Hori, M., see Kimura, Y. (206) 563
Horiba, M., see Ôi, N. (202) 299, (202) 302, (202) 305, (206) 143
Horiuchi, Y., see Ueno, H. (207) 425
Horváth, C., see Bij, K.E. (203) 65
Horváth, C., see Melander, W.R. (201) 201, (201) 211
Horváth, C., see Nahum, A. (203) 53
Hostettmann, K., Hostettmann-Kaldas, M. and Sticher, O.
Rapid preparative separation of natural products by centrifugal TLC (202) 154
Hostettmann-Kaldas, M., see Hostettmann, K. (202) 154
Houwen, O.A.G.J. van der, see Van der Houwen, O.A.G.J. (209) 393
Hovestad, A., see Visser, R. (204) 153
Howard, S.C. and McCormick, D.B.
HPLC of lipoic acid and analogues (208) 129
Hribar, J., see Wester, R. (209) 463
Hrušovský, M., see Pechál, M. (206) 541

Hsieh, J.Y.-K., Welch, D.K. and Turcotte, J.G.
General method for the analysis of phosphatidylcholines by HPLC (208) 398
Hsieh, K., see Hill, E.A. (208) 388
Hsu, D.-S., see Chen, S.S. (210) 186
Hubert, P. and Porath, J.
Metal chelate affinity chromatography. II. Group separation of mono- and dinucleotides (206) 164
Huggett, A., Andrews, P. and Flanagan, R.J.
Rapid micro-method for the measurement of paracetamol in blood plasma or serum using GLC with flame-ionisation detection (209) 67
Huizing, H.J. and Malingré, T.M.
Ion-pair adsorption chromatography of pyrrolizidine alkaloids (205) 218
Huizing, H.J., see Hendriks, H. (205) 444
Hulshoff, A., see Van der Houwen, O.A.G.J. (209) 393
Huneault, H., see Maguire, R.J. (209) 458
Hung, C.T. and Taylor, R.B.
Mechanism of retention of acidic solutes by octadecyl silica using quaternary ammonium pairing ions as ion exchangers (202) 333
Hung, C.T. and Taylor, R.B.
Ion-exchange-desolvation mechanism on octadecyl silica using anionic hydrophobic pairing ions (209) 175
Hunter, C., see Sugden, K. (204) 195
Hupe, K.P. and Lauer, H.H.
Selection of optimal conditions in preparative LC. I. Theory (203) 41
Huq, D., see Abraham, M.H. (206) 147
Husmann, H., see Schomburg, G. (203) 179, (204) 85

I

Iacobucci, G.A., see Jones, B.B. (202) 127
Ikushige, T., see Matsushita, S. (208) 429
Iler, R.K.
Silanol groups on silica gel (209) 341
Improta, C., see Nota, G. (207) 47
Inczédy, J., see Hajós, P. (201) 193, (201) 253
Inczédy, J., see Marton, A. (201) 79, (201) 85
Inczédy, J., see Marton-Schmidt, E. (201) 73
Inczédy, J., see Szabadka, Ö. (201) 59, (201) 67
Inda, Y., see Ôi, N. (208) 404
Indemans, A.W.M., see Van der Houwen, O.A.G.J. (209) 393
Ingebretsen, O.C. and Farstad, M.
Direct measurement of free coenzyme A in biological extracts by reversed-phase HPLC (202) 439
Ingebretsen, O.C. and Farstad, M.
Separation of the oxidized and reduced forms of dithiothreitol and 2-mercaptoethanol by reversed-phase HPLC. Application of the method to biological extracts and to the determination of disulphides (210) 522
Innis, S.M. and Clandinin, M.T.
Separation of phospholipids on chromarods (205) 490
Irving, G.C.J.
GC of inositols as their hexakis-O-acetyl derivatives (205) 460
Isaac, K., see Corina, D.L. (210) 146
Ishida, Y., Fujita, T. and Asai, K.
New detection and separation method for amino acids by HPLC (204) 143
Ishii, D., see Goto, M. (208) 261
Isobe, T., see Shimono, T. (205) 49
Ito, Y.
New continuous extraction method with a coil planet centrifuge (207) 161
Ito, Y. and Bhatnagar, R.
Preparative counter-current chromatography with a rotating coil assembly (207) 171
Ito, Y., see Nakazawa, H. (205) 482
Iwaeda, T., see Kato, Y. (205) 185, (206) 135, (208) 71
Iwai, H., see Arakawa, Y. (207) 237

J

Jaffrezic-Renault, N., Poirier-Andrade, H. and Trang, D.H.
Models for the adsorption of uranium on titanium dioxide (201) 187
Jakab, M., Vasileva, R. and Haskó, F.
Application of CM-Sephadex C-50 for the production of immunoglobulins (201) 281
James, H., see Hendrix, D.L. (210) 45
James, H.A., Steel, C.P. and Wilson, I.
Impurities arising from the use of XAD-2 resin for the extraction of organic pollutants in drinking water (208) 89
James, L.B.
Taurine levels in cat plasma (209) 479
Janák, J., see Soják, L. (209) 15
János, É., Darvas, F., Papp, O., Valkó, K. and Szász, G.
Assessment of quantitative relationships between Kováts' retention index and chemical structure: prediction for pyrido-pyrimidine derivatives (202) 122
Janssen, H.J.L., Tjaden, U.R., De Jong, H.J. and Wahlund, K.-G.
Reversed-phase ion-pair partition chromatography of biogenic catecholamines and their α-methyl homologues with

tributylphosphate as stationary phase (202) 223
Jansson, S.O., Andersson, I. and Persson, B.A. Solute-solvent interactions in ion-pair LC of amines on non-polar bonded phases using 1-pentanol and N,N-dimethyloctylamine as organic modifiers (203) 93
Janzen, K.-P., see Blasius, E. (201) 147
Jaroniec, J.A., see Jaroniec, M. (210) 130
Jaroniec, M. and Jaroniec, J.A. Simple model of LSC involving solute-solvent and solvent-solvent interactions (210) 130
Jellema, R., Elema, E.T. and Malingré, T.M. Fluorodensitometric determination of potato glycoalkaloids on thin-layer chromatograms (210) 121
Jellenz, W., see Gübitz, G. (203) 377
Jensen, G.W. Improved separation of triglycerides at low temperatures by reversed-phase LC (204) 407
Jerumanis, J., see Mulkay, P. (208) 419
Jessee, J.A., Valerias, C., Benoit, R.E., Hendricks, A.C. and McNair, H.M. Determination of cyanuric acid by HPLC (207) 454
Joachimiak, A., Zwierzyński, T., Radocki, D., Barciszewska, M. and Barciszewski, J. Heparin-Sepharose column chromatography as a new method for the purification of aminoacyl-tRNA synthetases (206) 600
Jones, B.B., Clark, B.C. Jr. and Iacobucci, G.A. Semipreparative HPLC separation of singlet oxygen derived limonene hydroperoxides (202) 127
Jones, R.G. Wyn, see Wyn Jones, R.G. (210) 550
Jong, A.W.J. de, see De Jong, A.W.J. (209) 432
Jong, G.J. de, see De Jong, G.J. (205) 77
Jong, H.J. de, see De Jong, H.J. (202) 223
Jönsson, J.Å. and Mathiasson, L. Mixed retention mechanisms in GLC. III. Determination of the gas-liquid adsorption coefficient for diisopropyl ether on *n*-octadecane (206) 1
Jönsson, J.Å., Mathiasson, L. and Suprynowicz, Z. Mixed retention mechanisms in GLC. IV. Comparisons of silanized and Carbowax-modified supports (207) 69
Jönsson, J.Å., see Dalene, M. (207) 37
Josefsson, B., see Folestad, S. (203) 173
Joussot-Dubien, J., see Colin, J.M. (204) 135
Jurand, J., see Knox, J.H. (203) 85
Jurenitsch, J., Kopp, B., Gabler-Kolacsek, I. and Kubelka, W. GC determination of 6-deoxyhexoses, pentoses and hexoses of cardiac glycosides. II. GLC on glass capillary columns (in German) (210) 337
Jurenitsch, J., see Kopp, B. (210) 291
Justová, V. and Stárka, L. Separation of functional hydroxymetabolites of vitamin D_3 by TLC (209) 337

K

Kai, M., see Haraguchi, K. (202) 107
Kaitaranta, J.K., Geiger, P.J. and Bessman, S.P. HPLC separation of phospholipid precursors and their direct measurement by automatic phosphorus analysis (206) 327
Kaitaranta, J.K. and Nicolaides, N. Response and linearity of different lipid compounds when analyzed by TLC with flame ionization detection (205) 339
Kakehi, K., see Honda, S. (209) 299
Kálal, J., see Lukáš, J. (210) 255
Kalan, E.B., see Heisler, E.G. (210) 365
Kalghatgi, K., see Melander, W.R. (201) 201
Kalo, P. Glass capillary reaction loops for detection of alcohols, aldehydes and ketones by subtraction (205) 39
Kamerling, J.P., see Bruvier, C. (210) 487
Kamps, L.R., see Sonobe, H. (210) 356
Kaniansky, D., see Kenndler, E. (209) 306
Karasek, F.W., see Bowers, W.D. (206) 279, (207) 203
Karasek, F.W., see Eiceman, G.A. (210) 93
Karger, B.L., see Kirby, D.P. (203) 139
Karger, B.L., see Tapuhi, Y. (205) 325
Karler, R., see Borys, H.K. (205) 303
Karlsen, J., see Bredesen, J.E. (204) 361
Kasahara, Y., see Kinoshita, T. (210) 77
Kato, Y., Komiya, K., Iwaeda, T., Sasaki, H. and Hashimoto, T. Packing of Toyopearl column for gel filtration. I. Influence of packing velocity on column performance (205) 185
Kato, Y., Komiya, K., Iwaeda, T., Sasaki, H. and Hashimoto, T. Packing of Toyopearl columns for gel filtration. II. Dependence of optimal packing velocity on column size (206) 135
Kato, Y., Komiya, K., Iwaeda, T., Sasaki, H. and Hashimoto, T. Packing of Toyopearl columns for gel filtration. III. Semi-constant-pressure packing (208) 71
Kawai, C., see Yui, Y. (206) 586
Kawai, S., Kobayashi, K. and Takayama, Y. GC enzymic determination of amygdalin (210) 342
Kawai, S., see Kobayashi, K. (202) 93
Kazi, S.S., see Bafna, S.L. (201) 131
Keey, R.B., see Arcus, A.C. (202) 157
Keller, H.P., see Erni, F. (204) 65
Kelly, T., see Muschik, G.M. (202) 75

Kemp, T.R. and Andersen, R.A.
Separation of modified bases and ribonucleosides with cytokinin activity using fused silica capillary GC (209) 467
Kemula, W. and Kutner, W.
Alternating voltage polarographic detection for HPLC and its evaluation for the analysis of bile acids (204) 131
Kemula, W., Sybilska, D., Lipkowski, J. and Duszczyk, K.
High selectivity and efficiency in clathrate chromatography. Generation of absorption sites in the β-$Ni(NCS)_2$(4-methylpyridine)$_4$ phase by the mobile phase components (204) 23
Kenndler, E. and Kaniansky, D.
Off-line combination of isotachophoresis and MS (209) 306
Kennedy, J.F. and Barnes, J.A.
Affinity constants in immunoadsorptive chromatography: their simple determination and application to the selection of eluents in and optimization of the elution process (205) 31
Kettrup, A., see Maasfeld, W. (204) 461
Kever, J.J., Belenkii, G.B., Gankina, E.S., Vilenchik, L.Z., Kurenbin, O.I. and Zhmakina, T.P.
Determination of molecular-weight distribution of polymers by microcolumn exclusion chromatography (207) 145
Kever, J.J., see Gankina, E.S. (208) 381
Khulbe, K.C. and Mann, R.S.
Persulphate ion as a reagent for the detection of aromatic compounds containing the NH_2 group using TLC (208) 167
Kiliç, N., see Talieri, M.J. (206) 353
Kim, Y.H. and Tishbee, A.
Effect of degree of coating on column efficiency in LC (207) 245
Kimura, Y., Kitamura, H., Araki, T., Noguchi, K., Baba, M. and Hori, M.
Analytical and preparative methods for polymyxin antibiotics using HPLC with a porous styrene-divinylbenzene copolymer packing (206) 563
Kinberger, B., Holmén, A. and Wahrgren, P.
Determination of underivatized CNS-stimulants and methadone in urinary extracts by glass capillary GC (207) 148
King, L.A.
Analysis of drugs encountered in fatal poisonings using HPLC and fluorescence detection (208) 113
Kinghorn, A.D., see Marshall, G.T. (206) 421
Kinoshita, T., Kasahara, Y. and Nimura, N.
Reversed-phase HPLC resolution of non-esterified enantiomeric amino acids by derivatization with 2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl isothiocyanate and 2,3,4-tri-O-acetyl-α-D-arabinopyranosyl isothiocyanate (210) 77
Kinoshita, T., see Murayama, K. (205) 349
Kinoshita, T., see Nimura, N. (202) 375
Kinsella, J.E., see Goswami, S.K. (209) 334
Kiral, R.M., see Hanson, V.L. (205) 393
Kirby, D.P., Vouros, P., Karger, B.L., Hidy, B. and Petersen, B.
On-line LC-MS of ion pairs (203) 139
Kirby, W., see Wellum, D.A. (206) 400
Kirilenko, A.V., see Gerasimenko, V.A. (208) 9
Kirschbaum, J., see Perlman, S. (206) 311
Kiselev, A.V., see Davydov, V.Y. (204) 293
Kiss, G., see Lukačovič, Ľ. (207) 373
Kiss, M., Losonczi, B., Morgós, J., Rusznák, I. and Haklits, I.
Study of alkylating reactions catalysed by cation-exchange resins (201) 383
Kitahara, H., see Ôi, N. (202) 299, (202) 302, (202) 305, (206) 143, (207) 252, (208) 404
Kitamura, H., see Kimura, Y. (206) 563
Kitson, T.M., see Bishop, C.A. (208) 141
Kleeman, G., see Böhlen, P. (205) 65
Klein, A.E. and Davis, P.J.
Retention behavior of selected colchicine derivatives on reversed-phase HPLC systems (207) 247
Klein, W., see Blasius, E. (201) 147
Kleinmann, I. and Svoboda, V.
Chromatography of nucleoside phosphates on DEAE-Spheron 1000 with ethanol-ammonium formate as eluent (201) 265
Klemm, L.H., Shabtai, J. and Bodily, K.C.
Gas chromatography of some C_{13}-C_{16} alkylnaphthalenes on Bentone 34, silicone fluid DC 550 and Apiezon L phases (206) 372
Klok, J., Nieberg-van Velzen, E.H., De Leeuw, J.W. and Schenck, P.A.
Capillary GC separation of monosaccharides as their alditol acetates (207) 273
Klotz, H., see Blasius, E. (201) 147
Klyashchitsky, B.A. and Mitina, V.K.
Affinity adsorbents with polysaccharide spacers. Preparation and properties (210) 55
Klyashchitsky, B.A., Mitina, V.K., Morozevich, G.E. and Yakubovskaya, R.I.
Use of biospecific adsorbents with polysaccharide spacers in affinity chromatography (210) 67
Knauer, H., see Molnár, I. (201) 225
Knox, J.H. and Hartwick, R.A.
Mechanism of ion-pair LC of amines, neutrals, zwitterions and acids using anionic hetaerons (204) 3
Knox, J.H. and Jurand, J.
Zwitterion-pair chromatography of nucleotides and related species (203) 85
Knox, J.H., see Ghaemi, Y. (209) 191
Knuutinen, J.
TLC of chlorinated catechols on a silica gel 60 layer (209) 446
Knuutinen, J. and Tarhanen, J.
TLC of chlorinated guaiacols (207) 154
Kobayashi, H., Matano, O. and Goto, S.
Simultaneous quantitation of thioureas in rat plasma by HPLC (207) 281

Kobayashi, K., Fukui, E., Tanaka, M. and Kawai, S.
GC analysis of α-keto acids in aqueous solution as the O-(2,3,4,5,6-pentafluorobenzyl)oximes of their methyl esters (202) 93
Kobayashi, K., see Kawai, S. (210) 342
Kobayashi, O., Matsui, K., Minamiura, N. and Yamamoto, T.
Isolation of human urine urokinase by column chromatography on sawdust and some properties of the enzyme obtained (210) 180
Kočan, A., see Sackmauerová-Veningerová, M. (205) 194
Kodama, H., see Mikasa, H. (202) 504
Koen, J.G., see Deelder, R.S. (203) 153
Koenigsberger, R.U., see Abraham, M.H. (206) 147
Koeppe, R.E. II and Weiss, L.B.
Resolution of linear gramicidins by preparative reversed-phase HPLC (208) 414
Kohashi, K., see Haraguchi, K. (202) 107
Kohli, J.C., Gupta, R., Arora, A.K. and Kushminder
Dehydrogenation of terpenoids on chromatoplates (210) 370
Koizumi, K., Kubota, Y., Miki, H. and Utamura, T.
Determination of barbiturates in mouse tissues by HPLC (205) 401
Kolarz, B.N., see Galina, H. (201) 51
Kolb, B., Pospisil, P. and Auer, M.
Quantitative analysis of residual solvents in food packaging printed films by capillary GC with multiple headspace extraction (204) 371
Kolbe, A. and Kraus, G.
Correlation between GC and IR spectroscopic behaviour in nematic phases (202) 369
Kolomiets, L.N., see Shmidel, Y.B. (202) 279
Kolosky, M., see Vialle, J. (204) 429
Komers, R. and Černý, M.
1,5-Bis-(*m*-phenoxyphenyl)-1,1,3,3,5,5-hexaphenyltrisiloxane as a stationary phase in high-temperature GC (207) 345
Komiya, K., see Kato, Y. (205) 185, (206) 135, (208) 71
Komiya, T., see Amano, T. (208) 347
König, W.A. and Benecke, I.
GC separation of enantiomers of amines and amino alcohols on chiral stationary phases (209) 91
Kopp, B., Jurenitsch, J. and Kubelka, W.
Gas chromatographic determination of 6-deoxyhexoses, pentoses and hexoses of cardiac glycosides. I. GLC on packed columns (in German) (210) 291
Kopp, B., see Jurenitsch, J. (210) 337
Korhonen, I.O.O.
Glass capillary GC of methyl, methyl 2-chloro and chloromethyl esters of C_2-C_{20} *n*-carboxylic acids (209) 96
Környei, J., see Costantino, U. (201) 167
Korol, A.N. and Dovbush, T.I.
Selectivity of paraffinic stationary phases for GLC (209) 21
Korol, A.N., see Filonenko, G.V. (209) 385
Kotsubo, K., see Yoshida, K. (208) 104
Kou, A.Y., see Chen, S.S.-H. (208) 339
Kovan'ko, Y.A., see Sakodynskii, K.I. (204) 167
Koyanagi, Y., see Goto, M. (208) 261
Kozlowski, E., see Namiesnik, J. (208) 239
Kozuka, M., see Amano, T. (208) 347
Kraak, J.C., Ahn, G.X. and Fraanje, J.
Dynamic cation-exchange systems for rapid separations of nucleobases and nucleosides by HPLC (209) 369
Kraak, J.C., see Brugman, W.J.T. (205) 170
Kraak, J.C., see De Jong, A.W.J. (209) 432
Kraak, J.C., see Fekete, J. (204) 319
Královičová, E., see Soják, L. (206) 463, (206) 475
Kraus, G., see Kolbe, A. (202) 369
Kraus, G., see Soják, L. (206) 463, (206) 475
Kraus, L. and Stahl, E.
Study of factors which influence the TLC behaviour of compounds. III. TLC of fluorescein on pH-gradient layers (in German) (205) 457
Krien, P., see Arpino, P.J. (203) 117
Kříž, J., Průšová, D. and Vodička, L.
Reversed-phase chromatography of keto and hydroxy derivatives of adamantane and diamantane (207) 85
Kruck, T.P.A. and Logan, D.M.
Altered synthesis of carboxylacrylamide which offers improved resolution of venom proteins (206) 368
Krupčík, J., see Matisová, E. (205) 464
Krupčík, J., see Soják, L. (206) 463, (206) 475
Krzymien, M.
Sample collection and field analysis of tris-(2-ethylhexyl) phosphate used in a study of pesticide spray drift (204) 453
Kubelka, W., see Jurenitsch, J. (210) 337
Kubelka, W., see Kopp, B. (210) 291
Kubota, Y., see Koizumi, K. (205) 401
Kucera, P., Moros, S.A. and Mlodozeniec, A.R.
Differential frontal analysis of carboxylic acids (210) 373
Kudoh, M., Fudano, S. and Yamaguchi, S.
Determination of poly(ethylene glycols) in non-ionic surfactants by preparative HPLC (205) 473
Kudrjashov, L.I., see Zaslavsky, B.Y. (202) 63
Kuessner, A.
Monitoring of aggressive components by means of a simple corrosion-resistant all-glass process gas chromatograph with an argon plasma detector (204) 159
Kuga, S.
Pore size distribution analysis of gel substances by size exclusion chromatography (206) 449
Kuhnz, W., see Games, D.E. (203) 131
Kumanotani, J., see Yamauchi, Y. (210) 512
Kurenbin, O.I., see Kever, J.J. (207) 145

Kurhekar, M.P., D'Souza, F.C., Pundlik, M.D. and Meghal, S.K.
Identification of dieldrin derivatives (209) 101
Kurihara, H., see Matsuura, T. (201) 121
Kurihara, H., see Ujimoto, K. (208) 183, (210) 1
Kushminder, see Kohli, J.C. (210) 370
Kuss, H.J. and Feistenauer, E.
Quantitative HPLC assay for the determination of maprotiline and oxaprotiline in human plasma (204) 349
Kuster, B.F.M., see Verhaar, L.A.T. (210) 279
Kuster, W.C., Goldan, P.D. and Fehsenfeld, F.C.
Controlled environment portable gas chromatograph for *in situ* aircraft or balloon-borne applications (205) 271
Kutner, W., see Kemula, W. (204) 131

L

Labadie, R.P., see Van Meer, J.H. (205) 206
Lafosse, M., see Dreux, M. (204) 207
Laki, Z., see Marton-Schmidt, E. (201) 73
Lakszner, K., see Szepesy, L. (206) 611
Lamotte, M., see Colin, J.M. (204) 135
Lamparsky, D., see Schenk, H.P. (204) 391
Lancaster, F.E., see Lawrence, J.F. (210) 168
Landis, J.B., Grant, M.E. and Nelson, S.A.
Determination of clindamycin in pharmaceuticals by HPLC using ion-pair formation (202) 99
Lasker, J.M., see Abou-Donia, S.A. (206) 606
Lau, E.P. and Fall, R.R.
Chromatography of kidney propionyl-CoA and 3-methylcrotonyl-CoA carboxylases on Cibacron Blue- and Procion Red-substituted agaroses (205) 213
Lau, E.P., see Giuliano, K.A. (202) 447
Lauer, H.H., see Hupe, K.P. (203) 41
Lauriault, G., see Lebelle, M.J. (202) 144
Lawrence, J.F., Lancaster, F.E. and Conacher, H.B.S.
Separation and detection of synthetic food colors by ion-pair HPLC (210) 168
Le Goff, B., see Haesen, G. (204) 385
Lebelle, M.J., Wilson, W.L. and Lauriault, G.
HPLC determination of amoxycillin in pharmaceutical dosage forms (202) 144
Leblanc, R.M., see Tancrède, P. (207) 387
Leclercq, P.A., see Cramers, C.A. (203) 207
Ledermann, S., see Liardon, R. (203) 385
Lee, R.E. Jr., see Hendrix, D.L. (210) 45
Leeuw, J.W. de, see De Leeuw, J.W. (207) 273
Legault, D.
Investigation of the GLC separation of phencyclidine and some heterocyclic analogues by combined GLC-MS (202) 309
Legg, J.I., see Warner, B.D. (210) 419
Lehtonen, M.
GC determination of phenols as 2,4-dinitrophenyl ethers using glass capillary columns and an electron-capture detector (202) 413
Lembeck, F., see Saria, A. (208) 41
L'Emeillat, Y., Ménez, J.F., Berthou, F. and Bardou, L.
Quantitative GC determination of low-molecular-weight straight-chain carboxylic acids as their *p*-bromophenacyl esters after extractive alkylation in acidic medium (206) 89
Lemkowitz, S.M., see A'Campo, C.P.M.G. (203) 271
Lenfant, M., Millerioux-di Giusto, L., Masson, A. and Gasc, J.C.
Shortened purification procedure of a spleen-derived immunosuppressive peptide (206) 177
Leonhardt, J., see Popp, P. (210) 389
Lepri, L., Desideri, P.G. and Heimler, D.
TLC of aromatic amines on ammonium molybdophosphate and tungstophosphate (207) 29
Lepri, L., Desideri, P.G. and Heimler, D.
Reversed-phase and soap TLC of dipeptides (207) 412
Lepri, L., Desideri, P.G. and Heimler, D.
TLC of amino acids and dipeptides on RP-2, RP-8 and RP-18 plates impregnated with dodecylbenzenesulphonic acid (209) 312
Leroy, Y., see Bruvier, C. (210) 487
Leshem, R., see Gilon, C. (203) 365
Leuenberger, U., Gauch, R., Rieder, K. and Baumgartner, E.
Determination of nitrate and bromide in foodstuffs by HPLC (202) 461
Leuschner, J.T.A., see Harvey, D.J. (202) 83
Levsen, K., see Schäfer, K.H. (206) 245
Levy, M., see Hodgins, L.T. (202) 381
Lewis, E., see Games, D.E. (203) 131
Liardon, R., Ledermann, S. and Ott, U.
Determination of D-amino acids by deuterium labelling and selected ion monitoring (203) 385
Libert, B.
Rapid determination of oxalic acid by reversed-phase HPLC (210) 540
Liberti, A., see Bertoni, G. (203) 263
Liberti, A., see Ciccioli, P. (206) 35
Liberti, A., see Di Corcia, A. (204) 255
Liberti, L., Madi, I., Passino, R. and Walis, L.
Ion-exchange kinetics in selective systems (201) 43
Ligny, C.L. de, see De Ligny, C.L. (209) 363
Lim, C.K., Bull, R.V.A. and Rideout, J.M.
HPLC of bile pigments. Application to the determination of unconjugated bilirubin in serum (204) 219
Lin, H.B., Gaffney, J.S. and Campillo, A.J.
Phase-fluctuation optical heterodyne spectrometer as a non-destructive detector for GC (206) 205

Lin, J.-T., Nes, W.D. and Heftmann, E.
HPLC of triterpenoids (207) 457
Linden, J.H.M. van der, see Van der Linden, J.H.M. (204) 115
Linssen, H.A.J., see Deelder, R.S. (203) 153
Lipkowski, J., see Kemula, W. (204) 23
Literáthy, P., see Szepesy, L. (206) 611
Litvak, Z., see Gogitidze, N.M. (206) 239
Livesey, J.H., see Arcus, A.C. (202) 157
Lloyd-Jones, J.G., see Sugden, K. (204) 195
Lochmüller, C.H. and Hinshaw, J.V. Jr.
Direct GC resolution of enantiomers on optically active mesophases. V. Model chiral 3-aminopropylmethylsiloxane systems (202) 363
Lodge, B.A., see Carignan, G. (206) 174
Logan, D.M., see Kruck, T.P.A. (206) 368
Lombart, P., see Rollmann, B. (206) 158
Look, M.
LC determination of submicrogram amounts of ipsenol and ipsdienol, pheromone components of *Ips paraconfusus* Lanier (202) 148
Lory, E.R., see McLafferty, F.W. (203) 109
Losonczi, B., see Kiss, M. (201) 383
Low, G.K.C., see Alexander, P.W. (209) 29
Lowman, D.W., see Tshabalala, M.A. (207) 353
Luciani Giovagnotti, M.L., see Alberti, G. (201) 175
Lugade, A.G., see Ayyangar, N.R. (209) 113
Lukačovič, Ľ., Mikuláš, M., Vanko, A. and Kiss, G.
Application of headspace GC to the determination of chlorinated hydrocarbons in waste waters (207) 373
Lukáš, J., Bleha, M., Votavová, E., Švec, F. and Kálal, J.
Reactive polymers. XL. Study of the internal structure of thermally treated polymeric sorbents based on glycidyl methacrylate copolymers (210) 255
Lund, U., see Hansen, S.H. (210) 453
Lynch, R.J., see Brown, J.N. (204) 115

M

Maasfeld, W., Dülme, W. and Kettrup, A.
HPLC determination of the behaviour of metribuzin during some water treatment processes (in German) (204) 461
Macák, J., Nabivach, V.M., Buryan, P. and Berlizov, J.S.
Analysis of pyridine bases isolated from a high-temperature coal tar by capillary GC (209) 472
McCormick, D.B., see Howard, S.C. (208) 129
McDermott, S.D., see Spillane, W.J. (206) 376
MacGee, J. and Williams, M.G.
Preparation of sphingolipid fatty acid methyl esters for determination by GLC (205) 281
Maciel, G.E., Sindorf, D.W. and Bartuska, V.J.
Characterization of silica-attached systems by ^{29}Si and ^{13}C cross-polarization and magic-angle spinning nuclear magnetic resonance (205) 438
McKague, A.B.
Phenolic constituents in pulp mill process streams (208) 287
Mackey, L.N., Rodriguez, P.A. and Schroeder, F.B.
High-efficiency solid scintillation radioactivity detection for HPLC (208) 1
McKinnon, A.E., see Arcus, A.C. (202) 157
Macklin, W.B., Pickart, L. and Woodward, D.O.
Partial purification of microsomal proteolipid(s) from *Neurospora crassa* by HPLC on silica gel (210) 174
McLafferty, F.W. and Lory, E.R.
MS as a separation technique. Analysis of involatile samples (203) 109
McMahon, F.J., see Unger, P.D. (210) 360
McNair, H.M., see Jessee, J.A. (207) 454
Macrae, R. and Dick, J.
Analysis of carbohydrates using the mass detector (210) 138
Madi, I., see Liberti, L. (201) 43
Maes, G., see Verzele, M. (205) 367
Maeyer, L. de, see De Maeyer, L. (202) 45
Magin, D.F.
GC of simple monocarbonyls in cigarette whole smoke as the benzyloxime derivatives (202) 255
Maguire, R.J. and Huneault, H.
Determination of butyltin species in water by GC with flame photometric detection (209) 458
Mahapatra, G.N. and Das, H.P.
Separation of isomeric thiohydantoins by TLC (210) 188
Mahato, S.B., Sahu, N.P. and Roy, S.K.
HPLC method for the determination of diosgenin in plants (206) 169
Mahoney, W.C., see Pearson, J.D. (207) 325
Mahuzier, G., see Waechter, M.J. (204) 245
Maitra, C., see Alexander, P.W. (209) 29
Majors, R.E., see Apffel, J.A. (206) 43
Makarova, S.B., see Gogitidze, N.M. (206) 239
Malík, L., see Pechál, M. (206) 541
Malikowska, H., see Czerwinski, W. (208) 27
Malingré, T.M., see Hendriks, H. (205) 444
Malingré, T.M., see Huizing, H.J. (205) 218
Malingré, T.M., see Jellema, R. (210) 121
Mallen, D.N.B., see Harden, R.C. (206) 83
Mangani, F., see Crescentini, G. (204) 445
Mann, R.S., see Khulbe, K.C. (208) 167
Manning, W.B., see Muschik, G.M. (202) 75
Marciniak, W. and Witkiewicz, Z.
Effect of the amount of liquid crystal and type of support on some properties of the liquid crystalline stationary phase-support system (207) 333

Marinsky, J.A.
Application of ion-selectivity predictions to the analysis of ion binding by gels (201) 5
Markides, K., see Blomberg, L. (203) 217, (208) 231
Markos, C., see Wester, R. (209) 463
Markovski, W., see Slaats, E.H. (207) 299
Marmet, D., see Ndulue, A. (209) 323
Marnett, L.J., see Panthananickal, A. (206) 253
Marple, L., see Amos, B. (206) 151
Marquardt, R.R. and Frohlich, A.A.
Rapid reversed-phase HPLC method for the quantitation of vicine, convicine and related compounds (208) 373
Marques, S., see Grevillot, G. (201) 329
Marshall, G.T. and Kinghorn, A.D.
Isolation of phorbol and 4α-phorbol from croton oil by droplet counter-current chromatography (206) 421
Martin, J.P., see Charlionet, R. (205) 355
Martin, W.R., see Wu, K.M. (202) 500
Marton, A., Elvidge, J.A. and Inczédy, J.
Measurement of the relaxation time of water protons in ion exchanger-water systems (201) 79
Marton, A., Pap, T. and Inczédy, J.
Effect of hydrogen bonding on the selectivity of anion-exchange equilibria (201) 85
Marton-Schmidt, E., Inczédy, J., Laki, Z. and Szabadka, Ö.
Separation of metal ions on ion-exchange resin with ethylenediamine functional groups (201) 73
Masłowska, J. and Piętek, W.
Effect of complex formation in the separation of some phenols by ion-exchange chromatography (201) 293
Mason, S.F., see Drake, A.F. (202) 239
Masson, A., see Lenfant, M. (206) 177
Mastrogiacomo, A.R., see Crescentini, G. (204) 445
Matano, K., see Handa, Y. (206) 387
Matano, O., see Kobayashi, H. (207) 281
Matheson, A.R., see Creamer, L.K. (210) 105
Mathiasson, L., see Dalene, M. (207) 37
Mathiasson, L., see Jönsson, J.Å. (206) 1, (207) 69
Mathieu, J., see Namiesnik, J. (208) 239
Mathison, G.W., see Yang, M.T. (209) 316
Matin, S.B., see Amos, B. (206) 151
Matisová, E. and Krupčík, J.
Separation of multi-component mixtures of N-dealkylated degradation products of *s*-triazine herbicides and their parent compounds by glass capillary GLC (205) 464
Matsui, K., see Kobayashi, O. (210) 180
Matsumoto, U. and Shibusawa, Y.
Surface affinity chromatographic separation of blood cells. II. Influence of mobile phase composition on the chromatographic behaviour of human peripheral blood cells on polyethylene glycol-bonded Sepharose (206) 17
Matsushita, S., Tada, Y. and Ikushige, T.
Rapid hydrocarbon group analysis of gasoline by HPLC (208) 429
Matsuura, T., Yamamoto, Y., Kurihara, H. and Mizumachi, K.
Examination of radiation damage to ion exchangers by diffuse reflectance spectroscopy (201) 121
Maybaum, J., see Day, J.L. (206) 407
Mayer, R.T., see Chen, A.C. (207) 445
Mayer, W.J. and Greenberg, M.S.
Determination of some carbamate pesticides by HPLC with electrochemical detection (208) 295
Mazzo, D.J., see Brooks, M.A. (210) 531
Meer, J.H. van, see Van Meer, J.H. (205) 206
Meghal, S.K., see Kurhekar, M.P. (209) 101
Meiris, R.B., see Grant, D.W. (203) 293
Melander, W.R. and Horváth, C.
Mechanistic study on ion-pair reversed-phase chromatography (201) 211
Melander, W.R., Kalghatgi, K. and Horváth, C.
Formation of ion pairs under conditions employed in reversed-phase chromatography (201) 201
Melander, W.R., see Bij, K.E. (203) 65
Mendham, J., see Davies, J.E. (201) 305
Ménez, J.F., see L'Emeillat, Y. (206) 89
Mercier, M., see Rollmann, B. (206) 158
Messina, A. and Corradini, D.
TLC separation of the lower alkanols as the xanthates (207) 152
Mestechkina, N.M., see Zaslavsky, B.Y. (202) 63
Metcalf, W.S., see Arcus, A.C. (202) 157
Metzner, K., see Ecknig, W. (204) 29
Miheeva, L.M., see Zaslavsky, B.Y. (202) 63
Mikasa, H., Ageta, T., Mizoguchi, N. and Kodama, H.
Simple assay method using isotachophoresis for taurine in tissues of the rat (202) 504
Mikeš, O., Sedláčková, J., Rexová-Benková, L'. and Omelková, J.
HPLC of pectic enzymes (207) 99
Miki, H., see Koizumi, K. (205) 401
Mikuláš, M., see Lukačovič, Ľ. (207) 373
Mile, B., Morton, L. and Sewell, P.A.
Equilibrium displacement in a chromatographic reactor (204) 35
Miller, M.M., see Zielinski, W.L. Jr. (209) 87
Miller, N., see Tapuhi, Y. (205) 325
Millerioux-di Giusto, L., see Lenfant, M. (206) 177
Milligan, L.P., see Boila, R.J. (202) 283
Milligan, L.P., see Yang, M.T. (209) 316
Minamiura, N., see Kobayashi, O. (210) 180
Minárik, M., Popl, M. and Mostecký, J.
Variable-volume sample valve for HPLC (208) 67
Miraglia, V.R., see Nota, G. (207) 47
Mironova, L.I., see Nikashina, V.A. (201) 107
Mitina, V.K., see Klyashchitsky, B.A. (210) 55, (210) 67
Miura, K., Nakamura, H. and Tamura, Z.
Improvement of the parallel flow dialysis

technique for the detection of drug-binding proteins in column effluents (210) 461
Miura, K., Nakamura, H., Tanaka, H. and Tamura, Z.
Fluorescence detection of 8-hydroxyquinoline and some of its halogenated derivatives using post-column derivatization in HPLC (210) 536
Mizejewski, G.J., Vonnegut, M. and Simon, R.
Estradiol affinity chromatography. Application to purification of murine alpha-fetoprotein (202) 113
Mizobuchi, Y., Tanaka, M. and Shono, T.
Separation of aromatic amino acids on β-cyclodextrin polyurethane resins (208) 35
Mizoguchi, N., see Mikasa, H. (202) 504
Mizumachi, K., see Matsuura, T. (201) 121
Mizuno, N., see Morita, E. (202) 134
Mizutani, T.
Separation of proteins on silicone-coated porous glass (207) 276
Mlodozeniec, A.R., see Kucera, P. (210) 373
Moberg, U., see Einarsson, R. (209) 121
Moffat, A.C., see Gill, R. (204) 275
Molko, D., Derbyshire, R., Guy, A., Roget, A., Teoule, R. and Boucherle, A.
Exclusion column for HPLC of oligonucleotides (206) 493
Moll, N. and Gross, B.
Isolation and purification of Amadori compounds by semi-preparative reversed-phase HPLC (206) 186
Molnár, I., Knauer, H. and Wilk, D.
HPLC of ions (201) 225
Mondani, J., see Schmidt, R. (207) 435
Montreuil, J., see Bruvier, C. (210) 487
Moodie, I.M.
GLC of amino acids. The heptafluorobutyryl-isobutyl ester derivative of tryptophan (208) 60
Moosmann, H.
Semiquantitative determination of trace substances in the ng/g (ppb) range by means of TLC (209) 84
Mora de Gonzalez, N., Castagnola, M. and Rossetti, D.
Humic acid characterization of Colombian soil by disc electrophoresis and IR spectroscopy following gel filtration (209) 421
Morcamp, C., see Charlionet, R. (205) 355
Morel du Boil, P.G., see Schäffler, K.J. (207) 221
Moreland, M., see Geigert, J. (206) 625
Morgós, J., see Kiss, M. (201) 383
Mori, T., see Watanabe, T. (207) 13
Morin, C., see Erni, F. (204) 65
Morin, M., Chambon, P., Chambon, R. and Bichet, N.
Measurement of exposure to xylenes by separate determination of *m*- and *p*-methylhippuric acids in urine (210) 346
Morita, E. and Mizuno, N.
Separation of vitamin B_6 by reversed-phase ion-pair HPLC (202) 134
Moros, S.A., see Kucera, P. (210) 373
Morozevich, G.E., see Klyashchitsky, B.A. (210) 67
Mortensen, J.V.
Use of mixed lithium-sodium buffers and potassium buffers for separation of the common free amino acids in plant material on a two-column system (209) 41
Morton, L., see Mile, B. (204) 35
Moss, C.W.
GLC as an analytical tool in microbiology (203) 337
Mostecký, J., see Minárik, M. (208) 67
Mousdale, D.M.A.
Reversed-phase ion-pair HPLC of the plant hormones indolyl-3-acetic and abscisic acid (209) 489
Mozersky, S.M., Valentine, K.M., Gugger, R.E. and Tunick, M.
Further observations on the chromatography of myosin preparations on hydroxyapatite (207) 395
Mueller, H., see Unger, K. (202) 3
Mulkay, P., Touillaux, R. and Jerumanis, J.
Proanthocyanidins of barley: separation and identification (208) 419
Müller, H., see Scholz, B. (208) 156
Müller, J., see Stahl, E. (209) 484
Munro, G., Rowe, L.R. and Evans, M.B.
Quantitative analysis of diastereoisomeric alkanolamines as cyclic boronic acid derivatives (204) 201
Munsteren, A.J. van, see Van Munsteren, A.J. (204) 413
Muranaka, M., see Ueno, H. (207) 425
Murayama, K. and Kinoshita, T.
Preparation of N-chloro-5-dimethylamino-naphthalene-1-sulphonamide and its application as a fluorescence reagent for the detection of phenylthiohydantoinamino acids (205) 349
Muschik, G.M., Kelly, T. and Manning, W.B.
GLC separation of methoxy-substituted quinones on nematic liquid crystals (202) 75
Musial, C.J., see Sirota, G.R. (202) 294
Myasoedov, N.F., see Zolotarev, Y.A. (207) 63, (207) 231

N

Nabivach, V.M., see Gerasimenko, V.A. (208) 9
Nabivach, V.M., see Macák, J. (209) 472
Nagata, M., see Honda, S. (209) 299
Nagels, L.
Study of PC and TLC of phenolic substances by statistical methods (209) 377
Nagy, G., see Csövári, M. (201) 371
Nagy, S., see Nordby, H.E. (207) 21

Nahum, A. and Horváth, C.
Surface silanols in silica-bonded hydrocarbonaceous stationary phases. I. Dual retention mechanism in reversed-phase chromatography (203) 53
Nahum, A., see Bij, K.E. (203) 65
Naikwadi, K.P., Panse, D.G., Bapat, B.V. and Ghatge, B.B.
Liquid crystals. II. Applications of liquid crystals as stationary phases in GLC (206) 361
Nakamura, H., see Miura, K. (210) 461, (210) 536
Nakazawa, H., Andrews, P.A., Bachur, N.R. and Ito, Y.
Isolation of daunorubicin derivatives by counter-current chromatography with the horizontal flow-through coil planet centrifuge (205) 482
Namiesnik, J., Torres, L., Kozlowski, E. and Mathieu, J.
Evaluation of the suitability of selected porous polymers for preconcentration of volatile organic compounds (208) 239
Ndulue, A., Flandrois, J.-P. and Marmet, D.
Abnormal affinity of *Staphylococcus aureus* N-acetyl glucosamine ribitol teichoic acid for wheat-germ agglutinin (209) 323
Needham, L.L., see Holler, J.S. (206) 617
Nehls, I., see Ecknig, W. (204) 29
Neidleman, S.L., see Geigert, J. (202) 319, (205) 165, (206) 396
Nelson, S.A., see Landis, J.B. (202) 99
Nes, W.D., see Lin, J.-T. (207) 457
Nguyen, V.B., see Blasius, E. (201) 147
Nguyen-Tien, T., see Blasius, E. (201) 147
Nickless, G., Spitzer, T. and Pickard, J.A.
Determination of triadimefon in grape juice and wine using capillary GC (208) 409
Nicolaides, N., see Kaitaranta, J.K. (205) 339
Nieberg-van Velzen, E.H., see Klok, J. (207) 273
Niessen, W.M.A., see Werkhoven-Goewie, C.E. (203) 165
Nikashina, V.A., Tyurina, V.A. and Mironova, L.I.
Sorption of copper(II) ions on the sodium and the calcium form of zeolites (201) 107
Nimura, N., Ogura, H. and Kinoshita, T.
Reversed-phase LC resolution of amino acid enantiomers by derivatization with 2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl isothiocyanate (202) 375
Nimura, N., see Kinoshita, T. (210) 77
Nishikawa, M., see Ueno, H. (207) 425
Nishioka, K., see Amoscato, A.A. (205) 179
Noguchi, K., see Kimura, Y. (206) 563
Nondek, L. and Vyskočil, V.
Determination of surface hydroxyl groups on silanized silica gels for reversed-phase LC (206) 581
Noonan, P., see Wester, R. (209) 463
Nordby, H.E. and Nagy, S.
Chemotaxonomic study of neutral coumarins in roots of *Citrus* and *Poncirus* by TLC, GLC and HPLC analyses (207) 21
Nordholm, L., see Hansen, S.H. (204) 97
Nose, N., see Tanaka, A. (206) 531
Nota, G., Miraglia, V.R., Improta, C. and Acampora, A.
Determination of cyanides and thiocyanates in water by headspace GC with a nitrogen-phosphorus detector (207) 47
Novák, G., Erdélyi, M. and Vigvári, M.
Determination of the tetrathionate content of an anion-exchange resin (201) 313
Novák, J., Goliáš, J. and Drozd, J.
Determination of hydrophilic volatiles in gas-aqueous liquid systems by Grob's closed-loop strip/trap method and standard-addition calibration (204) 421
Nukatsuka, I., Taga, M. and Yoshida, H.
Separation of lanthanides by capillary tube isotachophoresis using complex-forming equilibria (205) 95
Nwanze, E.A.C.
Efficient lipoxygenase assay by GLC (202) 313

O

O'Brien, A.P., see Ferguson, D.A. (203) 313
Offord, R.E., see Rose, K. (210) 301
Ogierman, L.
GLC of selected benzimidazole fungicides by flash-heater methylation with trimethylanilinium hydroxide (210) 83
Ogilvie, K.K., see Pon, R.T. (205) 202
Ogura, H., see Nimura, N. (202) 375
Ohashi, S., see Hirai, Y. (206) 501
Ohkura, Y., see Haraguchi, K. (202) 107
Ohkura, Y., see Zaitsu, K. (206) 621
Ôi, N., Doi, T., Kitahara, H. and Inda, Y.
Direct separation of some alcohol enantiomers by GC with amino acid derivatives as chiral stationary phases (208) 404
Ôi, N., Horiba, M. and Kitahara, H.
GC separation of amino acid amide enantiomers on optically active stationary phases (202) 299
Ôi, N., Horiba, M., Kitahara, H., Doi, T., Tani, T. and Sakakibara, T.
Direct separation of α-hydroxycarboxylic acid ester enantiomers by GC with optically active copper(II) complexes (202) 305
Ôi, N., Horiba, M., Kitahara, H. and Shimada, H.
GC separation of enantiomers of some dipeptides on an optically active stationary phase (202) 302

Ôi, N., Kitahara, H. and Doi, T.
GC separation of amino acid, amine and carboxylic acid enantiomers with α-hydroxycarboxylic acid esters as chiral stationary phases (207) 252
Ôi, N., Kitahara, H., Horiba, M. and Doi, T.
GC separation of α-hydroxycarboxylic acid ester enantiomers using amino acid derivatives as chiral stationary phase (206) 143
Oka, K. and Hara, S.
Linear relationship between the logarithm of the equilibrium constants and the logarithm of the LC separation factors for tautomers obtained in different solvents (202) 187
Okamoto, M.
Preparation and evaluation of 3-amino-propyltriethoxysilane-treated silica for HPLC of low-molecular-weight aldehydes as their lutidine derivatives (202) 55
Okuno, T., see Takagi, T. (208) 201
Olieman, C., Sedlick, E. and Voskamp, D.
In situ silylation of an octadecylsilyl-silica stationary phase applied to the analysis of peptides, such as secretin and glucagon (207) 421
Omelková, J., see Mikeš, O. (207) 99
Omer, A.I.H., Gad Kariem, E.A. and Salama, R.B.
Separation and semi-quantitative determination of tetracycline degradation products in tetracycline hydrochloride powders and capsules by TLC (205) 486
Oppermann, G., see Popp, P. (207) 131, (210) 389
Oró, J., see Green, C. (207) 268
Osborn, T.W., see Hanson, V.L. (205) 393
Osborne, D.J., see Harden, R.C. (206) 83
Osman, S.F., see Heisler, E.G. (210) 365
Ostrovský, I., see Soják, L. (206) 463, (206) 475
Ott, U., see Liardon, R. (203) 385

P

Paanakker, J., see Poppe, H. (204) 77
Pacáková, V., see Štulík, K. (208) 269
Pacáková, V., see Tomková, H. (207) 403
Paczkowski, M.A., see Vinson, J.A. (206) 196
Panina, L.I., see Gogitidze, N.M. (206) 239
Panina, L.I., see Sakodynskii, K.I. (206) 233
Panschar, B.M., see Geigert, J. (205) 165
Panse, D.G., see Naikwadi, K.P. (206) 361
Pansu, M., Tostain, S. and Pinta, M.
GC study of variations in the amounts of fatty acids in millet seeds (in French) (204) 377
Panthananickal, A. and Marnett, L.J.
Comparison of commercial reversed-phase HPLC columns for the separation of benzo[*a*]pyrene diolepoxide-nucleic acid adducts (206) 253
Pap, T., see Marton, A. (201) 85
Papp, O., see János, É. (202) 122
Parees, D.M. and Prescott, S.R.
Direct determination of N-nitrosamines in amines using a gas chromatograph-thermal energy analyzer (205) 429
Parey, F., see Vidal-Madjar, C. (203) 247
Park, J.Y., see Hanson, V.L. (205) 393
Parris, R.M., see Guenther, F.R. (207) 256
Parsons, M.L., see Bowers, W.D. (206) 279, (207) 203
Paryjczak, T. and Zieliński, P.
Application of GC for investigating slow sorption processes (205) 425
Pashankov, P.P., Zikolov, P.S. and Budevsky, O.B.
pH method for the interpretation of HPLC behaviour with non-aqueous polar mobile phases (209) 149
Pasquale, G. di, see Di Pasquale, G. (206) 589
Passino, R., see Liberti, L. (201) 43
Patankar, A.V., see Udupa, S.R. (205) 470
Patel, M.B., see Bafna, S.L. (201) 131
Paton, W.D.M., see Harvey, D.J. (202) 83
Patterson, D.G., see Holler, J.S. (206) 617
Patthy, M. and Salát, J.
HPLC determination of grandaxin (a 2,3-benzodiazepine) and its trace impurities (210) 159
Pavlov, V.V., see Filonenko, G.V. (209) 385
Payne-Wahl, K., Spencer, G.F., Plattner, R.D. and Butterfield, R.O.
HPLC method for quantitation of free acids, mono-, di- and triglycerides using an IR detector (209) 61
Pazderník, O. and Schneider, P.
Peak moments for GC columns with a pressure drop (207) 181
Pchelkin, V.P. and Vereshchagin, A.G.
Reversed-phase TLC of diacylglycerols as their labile dimethylborate esters (209) 49
Pearson, J.D., Mahoney, W.C., Hermodson, M.A. and Regnier, F.E.
Reversed-phase supports for the resolution of large denatured protein fragments (207) 325
Pechál, M., Cvengrošová, Z., Holotík, Š., Malík, L. and Hrušovský, M.
Identification and determination of α-hydroxyketones in a reaction mixture (206) 541
Penkina, V.I., see Zolotarev, Y.A. (207) 63, (207) 231
Peppard, T.L. and Halsey, S.A.
Use of cation-exchange resin for the detection of alkylpyridines in beer (202) 271
Perlman, S. and Kirschbaum, J.
HPLC analyses of the antihypertensive drug captopril (206) 311
Perrino, C., see Bertoni, G. (203) 263
Perry, R.W., see Brough, A.W.J. (208) 175
Persson, B.A., see Jansson, S.O. (203) 93

Peteghem, C. van, see Van Peteghem, C. (210) 113
Peterka, F.
Selection of anion-exchange resins for boron thermal-regeneration systems (201) 359
Petersen, B., see Kirby, D.P. (203) 139
Petrenik, O.R., see Zolotarev, Y.A. (207) 63
Petrenik, O.V., see Zolotarev, Y.A. (207) 231
Petronio, B.M., see Devitofrancesco, G. (210) 261
Petrović, J.A., see Petrović, S.M. (205) 223
Petrović, S.M., Traljić, E. and Petrović, J.A.
Separation of some estrogens by TLC (205) 223
Pettersson, C. and Schill, G.
Separation of enantiomeric amines by ion-pair chromatography (204) 179
Pfaff-Dessalles, M.C., see Waechter, M.J. (204) 245
Pfeiffer, R., see Blasius, E. (201) 147
Phillips, D.W. and Towers, G.H.N.
Reversed-phase HPLC of red algal bromophenols (206) 573
Picard, C., see Hennion, M.C. (210) 211
Pichler, P., see Grob, K. (205) 1
Pickard, J.A., see Nickless, G. (208) 409
Pickart, L., see Macklin, W.B. (210) 174
Picker, J.E. and Sievers, R.E.
Lanthanide metal chelates as selective complexing sorbents for GC (203) 29
Piętek, W., see Masłowska, J. (201) 293
Pietta, P., Rava, A. and Biondi, P.
HPLC of nifedipine, its metabolites and photochemical degradation products (210) 516
Pietta, P., Rava, A. and Catenacci, E.
HPLC determination of vincamine (210) 149
Pinta, M., see Pansu, M. (204) 377
Pisoschi, A. and Tătaru, S.
Concentration and separation of Ni^{2+}, Cu^{2+} and Co^{2+} by back extraction chromatography using Lix 64N and cationic resins. I. Concentration of Ni^{2+} (201) 297
Plattner, R.D., see Payne-Wahl, K. (209) 61
Płaza, S.
High-voltage paper electrophoresis of zinc dialkyl- and diaryldithiophosphate lubricating oil additives (207) 407
Podmaniczky, L., see Szepesy, L. (206) 611
Pohland, A.E., see Haghighi, B. (206) 101
Poile, A.F. and Conlon, R.D.
Numerical spectroscopy: absorbance index technique and algorithm for qualitative analysis in LC (204) 149
Poirier-Andrade, H., see Jaffrezic-Renault, N. (201) 187
Pol, J.J.G. van der, see Van der Pol, J.J.G. (203) 227
Pommier, C., see Bocquet, J.F. (205) 239, (205) 251
Pon, R.T. and Ogilvie, K.K.
Simultaneous analysis of nucleosides and nucleotides by HPLC (205) 202
Ponsold, K., see Draffehn, J. (205) 113
Poole, C.F., see Sherwood, E. (205) 297
Popl, M., see Doležal, B. (207) 193
Popl, M., see Minárik, M. (208) 67
Popp, P., Leonhardt, J. and Oppermann, G.
Study of space charge phenomena in d.c. electron-capture detectors (210) 389
Popp, P. and Oppermann, G.
GC detection of SO_2, NO_2, amines and halocarbons using an aerosol ionization detector (207) 131
Poppe, H., Paanakker, J. and Bronckhorst, M.
Peak width in solvent-programmed chromatography. I. General description of peak broadening in solvent-programmed elution (204) 77
Poppe, H., see De Jong, A.W.J. (209) 432
Poppe, H., see Slaats, E.H. (207) 299
Porath, J., see Hubert, P. (206) 164
Porthault, M., see Beauchamp, R. (204) 123
Pospisil, P., see Kolb, B. (204) 371
Posset, L., see Brunnemann, K.D. (202) 494
Pougny, J.R., see Dreux, M. (204) 207
Prajapati, M.N., see Dobrevsky, I. (201) 377
Prescott, S.R., see Parees, D.M. (205) 429
Priddle, J.D., see Rose, K. (210) 301
Pronko, C., see Vinson, J.A. (206) 196
Průšová, D., see Kříž, J. (207) 85
Pundlik, M.D., see Kurhekar, M.P. (209) 101

Q

Queignec, R. and Cabanetos-Queignec, M.
GLC study of the thermodynamics of 1-iodoacetylene-Lewis donor molecular associations (209) 345
Quivoron, C., see Boué, J. (204) 185

R

Radocki, D., see Joachimiak, A. (206) 600
Räisänen, S., Hiltunen, R., Arstila, A.U. and Sipiläinen, T.
Determination of 2,3,7,8-tetrachlorodibenzo-*p*-dioxin in goat milk and tissues by glass capillary GC and medium resolution mass fragmentography (208) 323
Ramaley, L., see Siu, K.W.M. (210) 401
Ramsdell, H.S. and Buhler, D.R.
HPLC analysis of pyrrolizidine (*Senecio*) alkaloids using a reversed-phase styrene-divinylbenzene resin column (210) 154

Rasmussen, K.E., see Christiansen, A.L. (210) 163
Ratcliff, M., see Bergot, B.J. (204) 231
Rava, A., see Pietta, P. (210) 149, (210) 516
Redaelli, C., Formentini, L. and Santaniello, E. HPLC of *cis*- and *trans*-en-in-dicyclo ethers (spiro ethers) in *Matricaria chamomilla* L. flowers and in chamomile extracts (209) 110
Reddingius, R.J., De Jong, G.J., Brinkman, U.A.T. and Frei, R.W. Simple extraction detector for the LC determination of secoverine in biological samples (205) 77
Reddy, C.S., Reddy, R.V. and Hayes, A.W. HPLC analysis of the mycotoxin secalonic acid D and its application to biological fluids (208) 17
Reddy, R.V., see Reddy, C.S. (208) 17
Rees, H.H., see Dinan, L.N. (205) 139
Rees, L.V.C., see Barri, S.A.I. (201) 21
Regnier, F.E., see Pearson, J.D. (207) 325
Reháček, Z., see Flieger, M. (207) 139
Reich, T., Chen, K.S. and Wan, J.K.S. Integral HPLC-electron spin resonance spectrometer for *in situ* studies of thermal and photochemical free radical reactions. Separation of phenoxy, hydrazyl, nitroxide and silyl-substituted semiquinone radicals (206) 139
Retho, C., see Sudraud, G. (204) 397
Rexová-Benková, L'., see Mikeš, O. (207) 99
Reznikov, V.I., see Sakodynskii, K.I. (204) 167
Richter, M., see Bauer, P. (206) 343
Rideout, J.M., see Lim, C.K. (204) 219
Rieder, K., see Leuenberger, U. (202) 461
Righetti, P.G., see Bosisio, A.B. (209) 265
Rittich, B. and Dubský, H. Reversed-phase LC. II. Determination of partition coefficients of barbiturates and urea herbicides (209) 7
Rittmann, R., see Schomburg, G. (204) 85
Rivetna, M., see Shaw, R. (202) 347
Rivier, J.E. Evaluation of triethylammonium phosphate and formate-acetonitrile mixtures as eluents for high-performance gel permeation chromatography (202) 211
Rix, H. Detection of small variations in shape between two chromatographic peaks (204) 163
Rocca, J.L., see Vialle, J. (204) 429
Rodriguez, P.A., see Mackey, L.N. (208) 1
Rogers, L.B., see Tshabalala, M.A. (207) 353
Roget, A., see Molko, D. (206) 493
Roggendorf, E. and Spatz, R. Systematic use of tetrahydrofuran in reversed-phase HPLC. An example of the selectivity benefits of ternary mobile phases (204) 263
Rogozhin, S.V., see Zaslavsky, B.Y. (202) 63
Rollmann, B., Lombart, P., Rondelet, J. and Mercier, M. Determination of N-nitrosodiethanolamine in cosmetics by GC with electron capture detection (206) 158
Rondelet, J., see Rollmann, B. (206) 158
Roozen, A.M.P., see Gelsema, W.J. (209) 363
Roper, C.M., see Siu, K.W.M. (210) 401
Rosati, F., see Cartoni, G.P. (202) 131
Rose, J.B., see Abraham, M.H. (206) 147
Rose, K., Priddle, J.D. and Offord, R.E. Affinity technique for the isolation of polypeptides containing arginine modified with cyclohexane-1,2-dione, and their analysis by combined GLC-MS (210) 301
Roseboom, H., Berkhoff, C.J., Wammes, J.IJ. and Wegman, R.C.C. Reversed-phase ion-pair HPLC of nitrophenols (208) 331
Roseboom, H. and Herbold, H.A. Determination of triazine herbicides in various crops by capillary GC with thermionic detection (202) 431
Roseboom, H. and Herbold, H.A. Determination and confirmation of binapacryl and dinobuton residues on apples and cucumbers by HPLC (208) 137
Roselle, M., see Sy, J. (208) 164
Rosset, R., see Bollet, C. (206) 289
Rosset, R., see Gareil, P. (208) 365
Rosset, R., see Hennion, M.C. (210) 211
Rosset, R., see Sudraud, G. (204) 397
Rossetti, D., see Mora de Gonzalez, N. (209) 421
Roumeliotis, P., see Unger, K. (202) 3
Rowe, L.R., see Munro, G. (204) 201
Rowland, M., see Toon, S. (208) 391
Roy, S.K., see Mahato, S.B. (206) 169
Rusznák, I., see Kiss, M. (201) 383

S

Sachok, B., see Stranahan, J.J. (202) 233
Sackmauerová-Veningerová, M., Uhnák, J., Szokolay, A. and Kočan, A. Identification of chlorinated phenols as degradation products of chlorinated pesticides in biological materials (205) 194
Sadée, W., see Day, J.L. (206) 407
Sági, J., see Csárnyi, Á.H. (204) 213
Sahu, N.P., see Mahato, S.B. (206) 169
Saint Blancard, J., see Boschetti, E. (210) 469
Saito, S., see Tanaka, A. (206) 531
Saito, Y., see Fujii, Y. (202) 139
Sakakibara, T., see Ôi, N. (202) 305
Sakodynskii, K.I., Boeva, V.I., Panina, L.I. and Godovskii, Y. Physico-chemical and chromatographic properties of pyrazole-containing polymer sorbents (206) 233
Sakodynskii, K.I., Volkov, S.A., Kovan'ko, Y.A., Zel'venskii, V.Y., Reznikov, V.I. and

Averin, V.A.
Design of and experience in operating technological preparative installations (204) 167
Sakodynskii, K.I., see Gogitidze, N.M. (206) 239
Sakodynskii, K.I., see Sultanovich, Y.A. (202) 29
Sakodynskii, K.I., see Volkov, S.A. (202) 21
Salama, R.B., see Omer, A.I.H. (205) 486
Salát, J., see Patthy, M. (210) 159
Salinier, G., see Gareil, P. (208) 365
Sandberg, G., Andersson, B. and Dunberg, A.
Identification of 3-indoleacetic acid in *Pinus sylvestris* L. by GC-MS, and quantitative analysis by ion-pair reversed-phase LC with spectrofluorimetric detection (205) 125
Sandra, P., see Godefroot, M. (203) 325
Sandra, P., see Verzele, M. (205) 367, (209) 455
Sane, M.G., see Ayyangar, N.R. (209) 113
Sangö, C., see Skarping, G. (208) 313
Santaniello, E., see Redaelli, C. (209) 110
Santi, W., see Gübitz, G. (203) 377
Saria, A., Lembeck, F. and Skofitsch, G.
Determination of capsaicin in tissues and separation of capsaicin analogues by HPLC (208) 41
Sasaki, H., see Kato, Y. (205) 185, (206) 135, (208) 71
Sattar, M.A.
TLC of phenoxyacetic acid herbicides (209) 329
Saunders, J.A. and Blume, D.E.
Quantitation of major tobacco alkaloids by HPLC (205) 147
Sawada, T., see Amano, T. (208) 347
Scanlan, R.A., see Zielinski, W.L. Jr. (209) 87
Schäfer, K.H. and Levsen, K.
Direct coupling of a micro high-performance liquid chromatograph and a mass spectrometer (206) 245
Schäffler, K.J. and Morel du Boil, P.G.
Quantitative GC analysis of sucrose in the presence of sugar oximes using a buffered oximation reagent and glass capillary columns (207) 221
Schaffner, K., see Braslavsky, S.E. (205) 85
Schenck, P.A., see Klok, J. (207) 273
Schenk, H.P. and Lamparsky, D.
Analysis of nutmeg oil using chromatographic methods (204) 391
Scherpenzeel, G.J., see Cramers, C.A. (203) 207
Schieffer, G.W.
Reversed-phase HPLC with differential pulse polarographic detection for assaying drugs in feed. Stability-indicating assay of diacetolol (202) 405
Schill, G., see Pettersson, C. (204) 179
Schill, G., see Stuurman, H.W. (204) 43
Schmidt, R., Mondani, J., Ziegenhagen, E. and Dose, K.
HPLC of the mycotoxin sterigmatocystin and its application to the analysis of mouldy rice for sterigmatocystin (207) 435
Schmitt, M., see Erni, F. (204) 65
Schneider, P., see Pazderník, O. (207) 181
Schoenmakers, P.J., Billiet, H.A.H. and De Galan, L.
Use of gradient elution for rapid selection of isocratic conditions in reversed-phase HPLC (205) 13
Scholten, A.H.M.T., Brinkman, U.A.T. and Frei, R.W.
Solvent segmentation in LC: application to photochemical reaction detectors (205) 229
Scholten, G., see Blasius, E. (201) 147
Scholz, B. and Ballschmiter, K.
Preparation and reversed-phase HPLC of chlorophylls (208) 148
Scholz, B., Willascheck, K.D., Müller, H. and Ballschmiter, K.
Separation of chlorophylls by reversed-phase TLC on oil-impregnated cellulose layers (in German) (208) 156
Schomburg, G., Husmann, H. and Behlau, H.
Properties of untreated and treated glass capillary surfaces and their contribution to solute-stationary phase interaction and film fixation of the stationary liquid (203) 179
Schomburg, G., Husmann, H. and Rittmann, R.
"Direct" (on-column) sampling into glass capillary columns. Comparative investigation on split, splitless and on-column sampling (204) 85
Schönecker, B., see Draffehn, J. (205) 113
Schooley, D.A., see Bergot, B.J. (204) 231
Schram, S.B., see Tshabalala, M.A. (207) 353
Schrøder, K., see Brønstad, J.O. (206) 392
Schroeder, F.B., see Mackey, L.N. (208) 1
Schroeder, J.L., see Albro, P.W. (205) 103
Schwartz, D.P. and Allen, C.
Simple micro-acylating technique with gaseous reagents (208) 55
Schwarzenbach, R.
HPLC of polar compounds on buffered silica gel (202) 397
Sebille, B., Thuaud, N. and Tillement, J.P.
Retention data methods for the determination of drug-protein binding parameters by HPLC (204) 285
Secheresse, J.P., see Boschetti, E. (210) 469
Sedláčková, J., see Mikeš, O. (207) 99
Sedlick, E., see Olieman, C. (207) 421
Seki, T.
Chromatographic separation of some biogenic amines on a weakly acidic ion-exchange resin (207) 286
Senum, G.I.
Quenching or enhancement of the response of the photoionization detector (205) 413
Sesboüé, R., see Charlionet, R. (205) 355
Severini, C., see Di Corcia, A. (204) 255
Severson, R.F., see Arrendale, R.F. (208) 209
Sewell, P.A., see Mile, B. (204) 35
Seymour, M.D. and Bailey, D.L.
TLC of pyrithiones (206) 301
Shabtai, J., see Klemm, L.H. (206) 372
Shaw, R., Rivetna, M. and Elliott, W.H.
Bile acids. LXIII. Relationship between the mobility on reversed-phase HPLC and the structure of bile acids (202) 347

Shchyukina, L.G., see Zaslavsky, B.Y. (202) 63
Shearer, M.J., see Haroon, Y. (206) 333
Sheen, L., see Westwood, S.A. (204) 103
Sherwood, E., Poole, C.F., Sye, W.-F. and Zlatkis, A.
Study of the formation of the 2,4-dichlorobenzeneboronate derivative of 1-isopropylaminopropan-2-ol by transboronation (205) 297
Shibusawa, Y., see Matsumoto, U. (206) 17
Shibuya, N.
GLC analysis of partially methylated alditol acetates on a glass capillary column (208) 96
Shigematsu, H., see Yoshida, K. (208) 104
Shimada, H., see Ôi, N. (202) 302
Shimono, T., Isobe, T. and Tarutani, T.
Determination of trimethylsilyl derivatives of silicate anions by GC using a hydrogen flame-ionization detector (205) 49
Shinohara, T.
Use of a flame thermionic detector in the determination of glucosamine and galactosamine in glycoconjugates by GC (207) 262
Shmidel, Y.B., Berezkin, V.G. and Kolomiets, L.N.
The possibility of using osmotic phenomena in an eluent pump for column LC (202) 279
Shoemaker, B. and Birks, J.W.
Generalized chemiluminescence spray cell for LC detection: selective detection using $O_2(^1\Delta_g)$ (209) 251
Shono, T., see Mizobuchi, Y. (208) 35
Siciliano, J., see Heisler, E.G. (210) 365
Sidhu, K.S.
GC method for the determination of dimethyl sulfate in air (206) 381
Sievers, R.E., see Picker, J.E. (203) 29
Simon, H., see Blasius, E. (201) 147
Simon, R., see Mizejewski, G.J. (202) 113
Sinaÿ, P., see Dreux, M. (204) 207
Sindorf, D.W., see Maciel, G.E. (205) 438
Siouffi, A. and Guiochon, G.
Use of reversed-phase TLC for the identification of black inks from board felt markers and ball-point pens (209) 441
Siouffi, A.M., Bressolle, F. and Guiochon, G.
Optimization in TLC. Some practical considerations (209) 129
Sipiläinen, T., see Räisänen, S. (208) 323
Sirimanne, P., see Cheetham, N.W.H. (207) 439, (208) 100
Sirota, G.R., Uthe, J.F., Musial, C.J. and Zitko, V.
Inadvertent formation of polynuclear aromatic hydrocarbons by the flame sealing of glass ampules (202) 294
Siu, K.W.M., Roper, C.M., Ramaley, L. and Aue, W.A.
Electronic linearization of a d.c. electron-capture detector via constant-current operation (210) 401
Siu, K.W.M., see Aue, W.A. (203) 237
Sjut, V.
Reversed-phase HPLC of substituted indoleacetic acids (209) 107
Skakum, W., see Carignan, G. (206) 174
Skarping, G., Sangö, C. and Smith, B.E.F.
Trace analysis of isocyanates in industrial atmospheres using GC and electron-capture detection (208) 313
Skelly, N.E.
HPLC analysis of technical Ruelene insecticide (206) 181
Skofitsch, G., see Saria, A. (208) 41
Slaats, E.H., Markovski, W., Fekete, J. and Poppe, H.
Distribution equilibria of solvent components in reversed-phase LC columns and relationship with the mobile phase volume (207) 299
Sloan, J.W., see Wu, K.M. (202) 500
Sluyterman, L.A.Æ. and Wijdenes, J.
Chromatofocusing. III. The properties of a DEAE-agarose anion exchanger and its suitability for protein separations (206) 429
Sluyterman, L.A.Æ. and Wijdenes, J.
Chromatofocusing. IV. Properties of an agarose polyethyleneimine ion exchanger and its suitability for protein separations (206) 441
Smith, B.E.F., see Skarping, G. (208) 313
Smith, D.A., see Barth, H.G. (206) 410
Smith, J.M., see Harden, R.C. (206) 83
Smith, L.S., see Steiner, A.W. (202) 263
Smith, R.A., see Steiner, A.W. (202) 263
Smith, R.M.
Reversed-phase LC of isomeric alkylbenzenes (209) 1
Smithers, J., see Amos, B. (206) 151
Smolková, E., see Tomková, H. (207) 403
Smolková, E., see Zima, J. (207) 79
Smrek, A.L., see Holler, J.S. (206) 617
Snyder, L.R., Dolan, J.W. and Van der Wal, S.
Boxcar chromatography. A new approach to increased analysis rate and very large column plate numbers (203) 3
Snyder, R.S., see Bosisio, A.B. (209) 265
Soczewiński, E., see Bieganowska, M. (205) 451
Soják, L., Berezkin, V.G. and Janák, J.
Effect of adsorption on the reproducibility of retention indices of hydrocarbons in capillary GLC (209) 15
Soják, L., Kraus, G., Ostrovský, I., Královičová, E. and Krupčík, J.
High-resolution GC with liquid crystal glass capillaries. I. Separation of hydrocarbon isomers on nematic mesophases (in German) (206) 463
Soják, L., Kraus, G., Ostrovský, I., Královičová, E. and Krupčík, J.
High-resolution GC with liquid crystal glass capillaries. II. Separation of hydrocarbon isomers on smectic A and C modifications (in German) (206) 475
Sonobe, H., Carver, R.A. and Kamps, L.R.
Reversed-phase HPLC separation of

carbofuran and its five metabolites (210) 356
Sorel, R.H.A., see Van der Houwen, O.A.G.J. (209) 393
Souteyrand, C., see Bollet, C. (206) 289
Sparrow, J.T., see Hancock, W.S. (206) 59, (206) 71
Spatz, R., see Roggendorf, E. (204) 263
Spencer, G.F., see Payne-Wahl, K. (209) 61
Spillane, W.J. and McDermott, S.D.
GC separation of some dihalobenzene isomers and some substituted monohalobenzene isomers (206) 376
Spitzer, T., see Nickless, G. (208) 409
Squire, P.G.
Calculation of hydrodynamic parameters of random coil polymers from size exclusion chromatography and comparison with parameters by conventional methods (210) 433
Squire, P.G., see Himmel, M.E. (210) 443
Srinivasan, K.V., see Ayyangar, N.R. (209) 113
Stahl, E. and Müller, J.
pH-Gradient TLC of benzodiazepines (209) 484
Stahl, E., see Kraus, L. (205) 457
Štamberg, K., Cabicar, J. and Havlíček, L.
Ion-exchange kinetics in systems with non-linear equilibrium isotherms. Sorption of uranium(VI) on strong acid cation exchangers (201) 113
Stanke, Z., see Ecknig, W. (204) 29
Stárka, L., see Justová, V. (209) 337
Startin, J.R., see Gilbert, J. (205) 434
Stead, A.H., see Gill, R. (204) 275
Steel, C.P., see James, H.A. (208) 89
Steiner, A.W., Helander, E.R., Fujitaki, J.M., Smith, L.S. and Smith, R.A.
HPLC of acid-stable and acid-labile phosphoamino acids (202) 263
Steuerle, H.
Separation and determination of the *cis-trans* isomers of the vitamin A esters by HPLC (in German) (206) 319
Sticher, O., see Hostettmann, K. (202) 154
Stockemer, H., see Blasius, E. (201) 147
Storey, R., see Gorham, J. (210) 550
Stranahan, J.J., Deming, S.N. and Sachok, B.
Pulsed injections of ion interaction reagent applied to the liquid chromatographic separation of 2,6-disubstituted anilines (202) 233
Štrop, P. and Čechová, D.
Separation of α- and β-trypsin by hydrophobic interaction chromatography (207) 55
Stubbs, K., see Walker, I.C. (202) 491
Stuchlík, J., see Flieger, M. (207) 139
Štulík, K. and Pacáková, V.
Comparison of several voltammetric detectors for HPLC (208) 269
Stutte, C.A., see Hardin, J.M. (208) 124
Stuurman, H.W., Wahlund, K.-G. and Schill, G.
Reversed-phase LLC of organic acids with a complexing stationary phase containing tri-*n*-octylphosphine oxide (204) 43
Such, V., Traveset, J., Gonzalo, R. and Gelpi, E.
Quantitative techniques in TLC (209) 125
Such, V., see Traveset, J. (204) 51
Sudraud, G., Coustard, J.M., Retho, C., Caude, M., Rosset, R., Hagemann, R., Gaudin, D. and Virelizier, H.
Analytical and structural study of some food emulsifiers by HPLC and off-line MS (204) 397
Sugden, K., Hunter, C. and Lloyd-Jones, J.G.
Separation of the diastereoisomers of pyro-glutamylhistidyl-3,3-dimethylprolineamide by ligand-exchange chromatography (204) 195
Sugii, A. and Harada, K.
Porous hydrochloride and hydrosulphate forms of poly(vinylpyridine) beads as subtractors for amines and alcohols in reaction GC (206) 485
Sultanovich, Y.A., Volkov, S.A. and Sakodynskii, K.I.
GC with a vapour mobile phase at the finite concentration of sorbate. II. Temperature effects and the characteristics of preparative separations (202) 29
Sultanovich, Y.A., see Volkov, S.A. (202) 21
Sun, S.F. and Wong, E.
Modified method of universal calibration for the determination of molecular weight and molecular-weight distribution (208) 253
Suprynowicz, Z., see Jönsson, J.Å. (207) 69
Suzuki, K., see Ujimoto, K. (210) 1
Suzuki, S., see Watabe, K. (206) 223
Švec, F., see Lukáš, J. (210) 255
Svoboda, V.
Search for optimal eluent composition for isocratic LCC (201) 241
Svoboda, V., see Kleinmann, I. (201) 265
Swanson, A.R. and Anders, M.W.
Method for the analysis of [^{13}C]carbon monoxide by GC-MS (207) 365
Sy, J. and Roselle, M.
Sensitive spray reagent for guanine nucleotides (208) 164
Sybilska, D., see Kemula, W. (204) 23
Sye, W.-F., see Sherwood, E. (205) 297
Szabadka, Ö., Burton, K.W. and Inczédy, J.
Modelling of chelating resin protonation equilibria (201) 67
Szabadka, Ö. and Inczédy, J.
Equation for the evaluation of the protonation constants of complex-forming resins (201) 59
Szabadka, Ö., see Marton-Schmidt, E. (201) 73
Szász, G., see János, É. (202) 122
Szejtli, J., see Zsadon, B. (208) 109
Székely, G., see Alt, K.O. (202) 151
Szepesi, G. and Gazdag, M.
HPLC of eburnane alkaloids. I. Separation on reversed phases (204) 341
Szepesi, G. and Gazdag, M.
HPLC of eburnane alkaloids. II. Separations on silica (205) 57

Szepesi, G., see Hlavay, J. (204) 59
Szepesy, L., Lakszner, K., Ackermann, L., Podmaniczky, L. and Literáthy, P.
Rapid method for the determination of polycyclic aromatic hydrocarbons in environmental samples by LC and GC (206) 611
Szilasi, M., see Zsadon, B. (208) 109
Szirtes, L., see Costantino, U. (201) 167
Szokolay, A., see Sackmauerová-Veningerová, M. (205) 194

T

Tacussel, J., see Beauchamp, R. (204) 123
Tada, Y., see Matsushita, S. (208) 429
Taga, M., see Nukatsuka, I. (205) 95
Takács, J.M., see Tekler, V. (202) 179
Takagi, T., Takeda, K. and Okuno, T.
Effect of salt concentration on the elution properties of complexes formed between sodium dodecylsulphate and protein polypeptides in high-performance silica gel chromatography (208) 201
Takauchi, K., see Handa, Y. (206) 387
Takayama, Y., see Kawai, S. (210) 342
Takeda, K., see Takagi, T. (208) 201
Takeshita, R.
Improved microlitre syringe for GLC (209) 437
Talieri, M.J., Kiliç, N. and Thompson, J.S.
Separation of dinitrophenyl derivatives of amino sugars and aminodeoxyalditols by polyamide TLC (206) 353
Tallová, J. and Hakl, J.
Determination of natural cholestenone in rat adrenal extracts by HPLC (202) 487
Tamura, Z., see Miura, K. (210) 461, (210) 536
Tanaka, A., Nose, N., Yamada, F., Saito, S. and Watanabe, A.
Determination of nitrite in human, cow and market milks by GLC with electron-capture detection (206) 531
Tanaka, H., see Miura, K. (210) 536
Tanaka, M., see Kobayashi, K. (202) 93
Tanaka, M., see Mizobuchi, Y. (208) 35
Tancrède, P., Chauvette, G. and Leblanc, R.M.
General method for the purification of lipids for surface pressure studies. Application to monogalactosyldiglyceride (207) 387
Tangendjaja, B. and Wills, R.B.H.
Analysis of mimosine and 3-hydroxy-4(1H)-pyridone by HPLC (202) 317
Tani, T., see Ôi, N. (202) 305
Tappa, R., see Ciccioli, P. (206) 35
Tapuhi, Y., Miller, N. and Karger, B.L.
Practical considerations in the chiral separation of Dns-amino acids by reversed-phase LC using metal chelate additives (205) 325
Tarhanen, J., see Knuutinen, J. (207) 154
Tarutani, T., see Shimono, T. (205) 49
Tátaru, S., see Pisoschi, A. (201) 297
Taylor, R.B., see Hung, C.T. (202) 333, (209) 175
Teeuwsen, J., see Van der Houwen, O.A.G.J. (209) 393
Tegtmeier, F., see Holloway, C.J. (202) 423
Tekler, V. and Takács, J.M.
Mathematical aspects of the Rohrschneider concept (in German) (202) 179
Teo, T.P., see Dutt, M.C. (206) 267
Teoule, R., see Molko, D. (206) 493
Tertykh, V.A., see Filonenko, G.V. (209) 385
Teschner, M., see Wehner, H. (204) 481
Thompson, D.K., see Torello, L.A. (202) 195
Thompson, J.S., see Talieri, M.J. (206) 353
Thomsen, M., see Hansen, S.H. (209) 77, (210) 453
Thorn, W., Bläker, F. and Weiland, E.
Preparative capillary isotachophoresis: a micro method for the purification of erythropoietin (210) 319
Thorpe, C., see Haghighi, B. (206) 101
Thuaud, N., see Sebille, B. (204) 285
Tillement, J.P., see Sebille, B. (204) 285
Tishbee, A., see Kim, Y.H. (207) 245
Tjaden, U.R., see Janssen, H.J.L. (202) 223
Tokunaga, Y., see Waki, H. (201) 259
Tomková, H., Pacáková, V. and Smolková, E.
GC behaviour of dibenzo[*b,f*]thiepines (207) 403
Tomori, E.
Separation of meso and racemic 2,3-dibromobutane-1,4-diol by GC (205) 387
Tomori, E. and Elekes, I.
Specific and sensitive method for the determination of Tobanum using GC with electron-capture and mass fragmentographic detection (204) 355
Tondeur, D., see Bailly, M. (201) 343
Tønnesen, F., see Christiansen, A.L. (210) 163
Toon, S. and Rowland, M.
Simple method for the optimisation of mobile phase composition for HPLC analysis of a multi-component mixture (208) 391
Torello, L.A., Yates, A.J. and Thompson, D.K.
Critical study of the alditol acetate method for quantitating small quantities of hexoses and hexosamines in gangliosides (202) 195
Torres, L., see Namiesnik, J. (208) 239
Tosa, T., see Watanabe, T. (207) 13
Tostain, S., see Pansu, M. (204) 377
Touillaux, R., see Mulkay, P. (208) 419
Toussaint, A., see Blasius, E. (201) 147
Towers, G.H.N., see Phillips, D.W. (206) 573
Townsend, R.P., see Fletcher, P. (201) 93
Traag, W.A., see Tuinstra, L.G.M.T. (204) 413
Traljić, E., see Petrović, S.M. (205) 223
Trang, D.H., see Jaffrezic-Renault, N. (201) 187
Trautschold, I., see Holloway, C.J. (202) 423

Traveset, J., Such, V., Gonzalo, R. and Gelpi, E.
First and second derivative recording of thin-layer chromatograms. Application to the assay of unresolved compounds (204) 51
Traveset, J., see Such, V. (209) 125
Trestianu, S., see Galli, M. (203) 193
Trojer, L., see Hansson, L. (207) 1
Tshabalala, M.A., Schram, S.B., Gerberich, F.G., Lowman, D.W. and Rogers, L.B.
High-voltage paper electrophoresis of organic compounds in acetonitrile (207) 353
Tsukatani, H., see Handa, Y. (206) 387
Tüdös, F., see Zsadon, B. (208) 109
Tuinstra, L.G.M.T., Traag, W.A. and Van Munsteren, A.J.
Determination of individual chlorinated biphenyls in agricultural products by automated capillary GC. Determination in cattle feed and its relation to milk residues (204) 413
Tunick, M., see Mozersky, S.M. (207) 395
Turcotte, J.G., see Hsieh, J.Y.-K. (208) 398
Tyurina, V.A., see Nikashina, V.A. (201) 107

U

Udupa, S.R. and Patankar, A.V.
HPLC separation of flavan-4*a*-ol and flavan-4β-ol epimers (205) 470
Ueno, H., Nishikawa, M., Muranaka, M. and Horiuchi, Y.
High-speed gel filtration chromatography of polymers formed by β-lactam antibiotics (207) 425
Uhnák, J., see Sackmauerová-Veningerová, M. (205) 194
Ujimoto, K. and Kurihara, H.
Mechanism of separation of aliphatic alcohols in aqueous dextran gel systems (208) 183
Ujimoto, K., Suzuki, K. and Kurihara, H.
Gel chromatographic behaviour of tetra-alkylammonium ions on Sephadex G-10 (210) 1
Unger, K., Roumeliotis, P., Mueller, H. and Goetz, H.
Novel porous carbon packings in reversed-phase HPLC (202) 3
Unger, P.D. and McMahon, F.J.
HPLC of cyclohexanone oxime in urine and plasma (210) 360
Utamura, T., see Koizumi, K. (205) 401
Uthe, J.F., see Sirota, G.R. (202) 294

V

Vajda, M., see Csárnyi, Á.H. (204) 213
Vajta, S., see Arpino, P.J. (203) 117
Valentine, K.M., see Mozersky, S.M. (207) 395
Valerias, C., see Jessee, J.A. (207) 454
Valkó, K., see János, É. (202) 122
Van Alboom, M., see Verzele, M. (205) 367
Van Damme, J.-C., Galoux, M. and Verdier, J.
Reversed-phase HPLC determination of ethylenethiourea in ethylenebisdithiocarbamate formulations (in French) (206) 125
Van den Berg, P.J., see A'Campo, C.P.M.G. (203) 271
Van den Brande, J.L., see Bakker, J.A. (209) 273
Van der Houwen, O.A.G.J., Sorel, R.H.A., Hulshoff, A., Teeuwsen, J. and Indemans, A.W.M.
Ion-exchange phenomena and concomitant pH shifts on the equilibration of reversed-phase packings with ion-pairing reagents (209) 393
Van der Linden, J.H.M., see Brown, J.N. (204) 115
Van der Pol, J.J.G., see Badings, H.T. (203) 227
Van der Wal, S., see Snyder, L.R. (203) 3
Van Haastert, P.J.M.
HPLC of nucleobases, nucleosides and nucleotides. I. Mobile phase composition for the separation of charged solutes by reversed-phase chromatography (210) 229
Van Haastert, P.J.M.
HPLC of nucleobases, nucleosides and nucleotides. II. Mobile phase composition for the separation of charged solutes by ion-exchange chromatography (210) 241
Van Meer, J.H. and Labadie, R.P.
Straight-phase and reversed-phase HPLC separations of valepotriate isomers and homologues (205) 206
Van Munsteren, A.J., see Tuinstra, L.G.M.T. (204) 413
Van Peteghem, C. and Bijl, J.
Ion-pair extraction and ion-pair adsorption TLC for rapid identification of ionic food dyes (210) 113
Vanhaelen, M., Vanhaelen-Fastré, R. and Elchami, A.A.
GLC determination of the iridoid content in *Harpagophytum procumbens* D.C. (209) 476
Vanhaelen-Fastré, R., see Vanhaelen, M. (209) 476
Vanko, A., see Lukačovič, Ľ. (207) 373
Vasileva, R., see Jakab, M. (201) 281
Vaughan, S., see Arcus, A.C. (202) 157
Veale, H.S. and Harrington, G.W.
Highly specific and sensitive detection method for nitrofurans by TLC (208) 161

Vedvick, T.S. and Edmonds, J.
Improved method of separating and quantitating hemoglobin compositions by isoelectric focusing (209) 451
Verbrugge, P., see A'Campo, C.P.M.G. (203) 271
Verdier, J., see Van Damme, J.-C. (206) 125
Vereshchagin, A.G., see Pchelkin, V.P. (209) 49
Verhaar, L.A.T. and Kuster, B.F.M.
Improved column efficiency in chromatographic analysis of sugars on cation-exchange resins by use of water-triethylamine eluents (210) 279
Verstappe, M., see Verzele, M. (209) 455
Vervisch, J., see Verzele, M. (205) 367
Verzele, M., Maes, G., Vuye, A., Godefroot, M., Van Alboom, M., Vervisch, J. and Sandra, P.
Chromatographic investigation of Jasmin absolutes (205) 367
Verzele, M., Verstappe, M. and Sandra, P.
Determination of traces of nitrogen and argon in oxygen by a simple GC method (209) 455
Verzele, M., see Godefroot, M. (203) 325
Vespalec, R.
Effect of the components of the chromatographic system on the electrokinetic streaming current generated in LC columns (210) 11
Vialle, J., Kolosky, M. and Rocca, J.L.
Determination of betaine in sugar and wine by LC (204) 429
Vidal-Madjar, C., Parey, F., Excoffier, J.-L. and Békássy, S.
Quantitative analysis of chlorofluoro-carbons. Absolute calibration of the electron-capture detector (203) 247
Vigh, G., see Hlavay, J. (204) 59
Vigvári, M., see Novák, G. (201) 313
Vilenchik, L.Z., see Kever, J.J. (207) 145
Vinson, J.A., Paczkowski, M.A. and Pronko, C.
Preadsorbent TLC. III. Direct detection of quinine in urine as a presumptive test for heroin (206) 196
Vion, G., see Colin, J.M. (204) 135
Virelizier, H., see Sudraud, G. (204) 397
Visser, R. and Hovestad, A.
Determination of the total sulphur content in gas oils with a flame photometric detector (204) 153
Vittori, O., see Beauchamp, R. (204) 123
Vlachogiannis, G.J., see Barker, P.E. (208) 74
Vodička, L., see Kříž, J. (207) 85
Volkov, S.A., Sultanovich, Y.A. and Sakodynskii, K.I.
GC with a vapour mobile phase at the finite concentration of sorbate. I. The sorption effect (202) 21
Volkov, S.A., see Sakodynskii, K.I. (204) 167
Volkov, S.A., see Sultanovich, Y.A. (202) 29
Von Arx, E.
Application of glass-lined stainless-steel columns in HPLC (209) 310
Vonnegut, M., see Mizejewski, G.J. (202) 113
Voser, W. and Weiss, K.
Influence of cations and anions on the separation properties of macroporous polystyrene-type resins for cephalosporins (201) 287
Voskamp, D., see Olieman, C. (207) 421
Votavová, E., see Lukáš, J. (210) 255
Vouros, P., see Kirby, D.P. (203) 139
Vuye, A., see Verzele, M. (205) 367
Vyskočil, V., see Nondek, L. (206) 581

W

Wada, O., see Arakawa, Y. (207) 237
Waechter, M.J., Pfaff-Dessalles, M.C. and Mahuzier, G.
Behaviour and separation of short-chain dicarboxylic acids by GC on glass capillary columns (in French) (204) 245
Wahlund, K.-G. and Edlén, B.
Separation of 5-hydroxyindole-3-acetic acid and indole-3-acetic acid in urine by direct injection on a reversed-phase column containing a hydrogen-accepting stationary phase (204) 269
Wahlund, K.-G., see Janssen, H.J.L. (202) 223
Wahlund, K.-G., see Stuurman, H.W. (204) 43
Wahrgren, P., see Kinberger, B. (207) 148
Wainer, I.W.
Crown ether-catalyzed synthesis of diastereoisomeric esters. Enantiomeric purity of mandelic acid via HPLC analysis of its diastereoisomeric 2-octyl esters (202) 478
Waki, H. and Tokunaga, Y.
Donnan exclusion chromatography. I. Theory and application to the separation of phosphorus oxoanions or metal cations (201) 259
Wal, S. van der, see Van der Wal, S. (203) 3
Walis, L., see Liberti, L. (201) 43
Walker, I.C., Gilbert, M.T. and Stubbs, K.
The chromatographic separation of uroporphyrin I and III octamethyl esters (202) 491
Wall, R.A., see Ghaemi, Y. (209) 191
Wallbank, B.E.
Gas chromatographic determination of carbaryl residues on stored wheat by on-column transmethylation (208) 305
Wammes, J.IJ., see Roseboom, H. (208) 331
Wan, J.K.S., see Reich, T. (206) 139
Wännman, T., see Blomberg, L. (203) 217, (208) 231
Warner, B.D., Boehme, G. and Legg, J.I.
Construction and evaluation of a programmable gradient liquid chromatograph (210) 419
Wassink, J.G., see Badings, H.T. (203) 227

Watabe, K., Hobo, T. and Suzuki, S.
Liquid crystals as the stationary phase in GC. IV. Evaluation of the combination of a separation column and an electric field liquid crystal column (206) 223
Watanabe, A., see Tanaka, A. (206) 531
Watanabe, T., Mori, T., Tosa, T. and Chibata, I.
Characteristics of immobilized tannin for protein adsorption (207) 13
Webster, H.K. and Whaun, J.M.
Application of simultaneous UV-radioactivity HPLC to the study of intermediary metabolism. I. Purine nucleotides, nucleosides and bases (209) 283
Weerasinghe, N.C.A., see Games, D.E. (203) 131
Wegman, R.C.C., see Roseboom, H. (208) 331
Wehner, H. and Teschner, M.
Correlation of crude oils and source rocks in the German Molasse basin. Applicability of chromatographic techniques (204) 481
Weiland, E., see Thorn, W. (210) 319
Weiss, K., see Voser, W. (201) 287
Weiss, L.B., see Koeppe, R.E. II (208) 414
Welch, D.K., see Hsieh, J.Y.-K. (208) 398
Wellum, D.A. and Kirby, W.
HPLC assay for theaflavins (206) 400
Werkhoven-Goewie, C.E., Niessen, W.M.A., Brinkman, U.A.T. and Frei, R.W.
LC detector for organosulphur compounds based on a ligand-exchange reaction (203) 165
Wesselingh, J.A., see Buijs, A. (201) 319
West, J.C.
Extraction and analysis of disperse dyes on polyester textiles (208) 47
Westcott, J.W. and Bidleman, T.F.
Determination of polychlorinated biphenyl vapor pressures by capillary GC (210) 331
Wester, R., Noonan, P., Markos, C., Bible, R. Jr., Aksamit, W. and Hribar, J.
Identification of carbamate derivatives formed during chloroform extraction of tricyclic antidepressants from urine (209) 463
Westwood, S.A., Games, D.E. and Sheen, L.
Use of circular dichroism as a HPLC detector (204) 103
Westwood, S.A., see Games, D.E. (203) 131
Whall, T.J.
HPLC of polymyxin B sulfate and colistin sulfate (208) 118
Whaun, J.M., see Webster, H.K. (209) 283
White, L.B., see Elrod, L. Jr. (208) 357
Wickramanayake, P.P. and Aue, W.A.
Effects of hydrogen treatment on typical GC supports (210) 133
Wiejcka, M., see Czerwinski, W. (208) 27
Wijdenes, J., see Sluyterman, L.A.Æ. (206) 429, (206) 441
Wilk, D., see Molnár, I. (201) 225
Willascheck, K.D., see Scholz, B. (208) 156
Williams, M.G., see MacGee, J. (205) 281
Wills, R.B.H., see Tangendjaja, B. (202) 317
Wilms, G.P., see Gelsema, W.J. (209) 363
Wilson, I., see James, H.A. (208) 89
Wilson, W.L., see Lebelle, M.J. (202) 144
Witkiewicz, Z., see Marciniak, W. (207) 333
Wojnárovits, L. and Földiák, G.
Electron-capture detection of aromatic hydrocarbons (206) 511
Wong, C.F., see Elrod, L. Jr. (208) 357
Wong, E., see Sun, S.F. (208) 253
Woodward, D.O., see Macklin, W.B. (210) 174
Wu, K.M., Sloan, J.W. and Martin, W.R.
Development of a combined HPLC-fluorometric quantitative assay for enkephalins (202) 500
Wurst, M., see Flieger, M. (207) 139
Wyn Jones, R.G., see Gorham, J. (210) 550

Y

Yakubovskaya, R.I., see Klyashchitsky, B.A. (210) 67
Yamada, F., see Tanaka, A. (206) 531
Yamaguchi, S., see Kudoh, M. (205) 473
Yamamoto, T., see Kobayashi, O. (210) 180
Yamamoto, Y., see Matsuura, T. (201) 121
Yamauchi, Y. and Kumanotani, J.
Packing of 3-μm particle ODS silicas using hexanol-1-methylene chloride (1:1) as a slurry medium in HPLC (210) 512
Yamazaki, M., see Fujii, Y. (202) 139
Yang, M.T., Milligan, L.P. and Mathison, G.W.
Improved sugar separation by HPLC using porous microparticle carbohydrate columns (209) 316
Yates, A.J., see Torello, L.A. (202) 195
Yeadon, G., see Dawkins, J.V. (206) 215
Yert, L.W., see Holler, J.S. (206) 617
Yokouchi, Y., Fujii, T., Ambe, Y. and Fuwa, K.
Determination of monoterpene hydrocarbons in the atmosphere (209) 293
Yokoyama, T., see Furukawa, M. (208) 424
Yoneda, H., see Yukimoto, T. (210) 477
Yoshida, H., see Nukatsuka, I. (205) 95
Yoshida, K., Kotsubo, K. and Shigematsu, H.
HPLC of hexopyranosides and hexofuranosides (208) 104
Yoza, N., see Hirai, Y. (206) 501
Yu, T.H., see Arakawa, Y. (207) 237
Yui, Y. and Kawai, C.
Comparison of the sensitivity of various post-column methods for catecholamine analysis by HPLC (206) 586
Yukimoto, T. and Yoneda, H.
Chromatographic study of optical resolution. VI. Separation of isomers of facial tris(aminoacidato) mixed ligand chelates with *d*-tartrate and antimony *d*-tartrate adsorbed on an anion-exchange resin (210) 477

Z

Zaitsu, K., Eto, S. and Ohkura, Y.
HPLC determination of dityrosine in biological samples (206) 621
Zanini, M.G., see Caccia, S. (210) 311
Zaslavsky, B.Y., Miheeva, L.M., Mestechkina, N.M., Shchyukina, L.G., Chlenov, M.A., Kudrjashov, L.I. and Rogozhin, S.V.
Use of solute partition for comparative characterization of several aqueous biphasic polymeric systems (202) 63
Zel'venskii, V.Y., see Sakodynskii, K.I. (204) 167
Zhmakina, T.P., see Kever, J.J. (207) 145
Ziegenhagen, E., see Schmidt, R. (207) 435
Zieliński, P., see Paryjczak, T. (205) 425
Zielinski, W.L. Jr., Scanlan, R.A. and Miller, M.M.
Feasibility study of high-temperature liquid crystals in wall-coated open-tubular columns (209) 87
Zikolov, P.S., see Pashankov, P.P. (209) 149
Zima, J. and Smolková, E.
Semiempirical prediction of retention of some ampholytes on a carbon adsorbent (207) 79
Zimmermann, J., see Donike, M. (202) 483
Zitko, V., see Sirota, G.R. (202) 294
Zlatkis, A., see Sherwood, E. (205) 297
Zolotarev, Y.A., Myasoedov, N.F., Penkina, V.I., Dostovalov, I.N., Petrenik, O.V. and Davankov, V.A.
Resolution of tritium-labelled amino acid racemates by ligand-exchange chromatography. II. L-Hydroxyproline- and L-phenylalanine-modified resins for the resolution of common α-amino acids (207) 231
Zolotarev, Y.A., Myasoedov, N.F., Penkina, V.I., Petrenik, O.R. and Davankov, V.A.
Ligand-exchange chromatography of racemates. XIII. Micropreparative resolution of L,D-leucine (207) 63
Zsadon, B., Szilasi, M., Tüdös, F. and Szejtli, J.
Inclusion chromatography of alkaloids on cylcodextrin polymer gel beds (208) 109
Zvezdov, A., see Dobrevsky, I. (201) 377
Zwierzyński, T., see Joachimiak, A. (206) 600

SUBJECT INDEX

VOLUMES 201—210

The volume number is placed in parentheses before the page number

A

Abscisic acid
Rapid method for the determination of abscisic acid applied to apple leaves (205) 199

Analysis of plant hormones using HPLC (208) 124

Reversed-phase ion-pair HPLC of the plant hormones indolyl-3-acetic and abscisic acid (209) 489

Absolute calibration
Quantitative analysis of chlorofluorocarbons. Absolute calibration of the electron-capture detector (203) 247

Absorbance index
Numerical spectroscopy: absorbance index technique and algorithm for qualitative analysis in LC (204) 149

Acaricides
Determination and confirmation of binapacryl and dinobuton residues on apples and cucumbers by HPLC (208) 137

Acetic acid
Quantitative GC determination of low-molecular-weight straight-chain carboxylic acids as their *p*-bromophenacyl esters after extractive alkylation in acidic medium (206) 89

Acetogenin mevalonates
Isolation and characterization of euglobals from *Eucalyptus globulus* Labill. by preparative reversed-phase LC (208) 347

Acetonitrile
High-voltage paper electrophoresis of organic compounds in acetonitrile (207) 353

Acetylglucosamine ribitol teichoic acid
Abnormal affinity of *Staphylococcus aureus* N-acetyl glucosamine ribitol teichoic acid for wheat-germ agglutinin (209) 323

Acetylmorphine
Determination of opiates in biological samples by glass capillary GC with electron-capture detection (206) 109

Acidic solutes
Mechanism of retention of acidic solutes by octadecyl silica using quaternary ammonium pairing ions as ion exchangers (202) 333

Acids
Mechanism of ion-pair LC of amines, neutrals, zwitterions and acids using anionic hetaerons (204) 3

Activity coefficients
Determination of activity coefficients at very low concentrations by the inert gas stripping method (207) 193

Acylation
Simple micro-acylating technique with gaseous reagents (208) 55

Acylneuraminic acids
GLC and MS of methyl ethers of methyl N-acetyl-N-methyl-β-D-neuraminate methyl glycoside (210) 487

Adamantane
Reversed-phase chromatography of keto and hydroxy derivatives of adamantane and diamantane (207) 85

Adenine
Separation of 5-alkyluracils and purine bases in hydrolysates of enzymatically synthesized nucleic acids by ion-pair HPLC (204) 213

Adenine derivatives
Separation of modified bases and ribonucleosides with cytokinin activity using fused silica capillary GC (209) 467

Adsorbents
Influence of cations and anions on the separation properties of macroporous polystyrene-type resins for cephalosporins (201) 287

Affinity adsorbent preparation. Chemical features of agarose derivatization with trichloro-*s*-triazine (202) 381

HPLC of polar compounds on buffered silica gel (202) 397

Some critical parameters in collection, recovery and GC analysis of organic pollutants in ambient air using light adsorbents (203) 263

Use of triazine dyes in the affinity chromatographic purification of alkaline phosphatase from calf intestine (206) 521

Characteristics of immobilized tannin for protein adsorption (207) 13

Affinity adsorbents with polysaccharide spacers. Preparation and properties (210) 55

Use of biospecific adsorbents with polysaccharide spacers in affinity chromatography (210) 67

Recovery of vapours from solid adsorbents (210) 261

Adsorption isotherms
Ion-exchange-desolvation mechanism on octadecyl silica using anionic hydrophobic pairing ions (209) 175

Aerosol ionization detector
GC detection of SO_2, NO_2, amines and halocarbons using an aerosol ionization detector (207) 131

Affinity constants
Affinity constants in immunoadsorptive chromatography: their simple determination and application to the selection of eluents in and optimization of the elution process (205) 31

Aflatoxins
Development of a sensitive HPLC method for detection of aflatoxins in pistachio nuts (206) 101

Agarose derivatization
Affinity adsorbent preparation. Chemical features of agarose derivatization with trichloro-*s*-triazine (202) 381

Aggressive components
Monitoring of aggressive components by means of a simple corrosion-resistant all-glass process gas chromatograph with an argon plasma detector (204) 159

Air analysis
Controlled environment portable gas chromatograph for *in situ* aircraft or balloon-borne applications (205) 271

Alcohols
Glass capillary reaction loops for detection of alcohols, aldehydes and ketones by subtraction (205) 39

Porous hydrochloride and hydrosulphate forms of poly(vinylpyridine) beads as subtractors for amines and alcohols in reaction GC (206) 485

Reversed-phase chromatography of keto and hydroxy derivatives of adamantane and diamantane (207) 85

Component loss during evaporation-reconstitution of organic environmental samples for GC analysis (207) 203

Mechanism of separation of aliphatic alcohols in aqueous dextran gel systems (208) 183

Direct separation of some alcohol enantiomers by GC with amino acid derivatives as chiral stationary phases (208) 404

Aldehydes
Preparation and evaluation of 3-aminopropyl-triethoxysilane-treated silica for HPLC of low-molecular-weight aldehydes as their lutidine derivatives (202) 55

Glass capillary reaction loops for detection of alcohols, aldehydes and ketones by subtraction (205) 39

Alditol acetates
Critical study of the alditol acetate method for quantitating small quantities of hexoses and hexosamines in gangliosides (202) 195

GLC analysis of partially methylated alditol acetates on a glass capillary column (208) 96

Aldoses
GC of monosaccharides: formation of a single derivative for each aldose (207) 213

Rapid GC analysis of partially methylated aldoses as trimethylsilylated diethyl dithioacetals (209) 299

Alkaline phosphatase
Use of triazine dyes in the affinity chromatographic purification of alkaline phosphatase from calf intestine (206) 521

Alkaloids
Use of circular dichroism as a HPLC detector (204) 103

Determination of vincamine in human plasma using automated HPLC (204) 335

HPLC of eburnane alkaloids. I. Separation on reversed phases (204) 341

HPLC of eburnane alkaloids. II. Separations on silica (205) 57

Quantitation of major tobacco alkaloids by HPLC (205) 147

Ion-pair adsorption chromatography of pyrrolizidine alkaloids (205) 218

Isolation and separation of new natural lactam alkaloids of ergot by HPLC (207) 139

Retention behavior of selected colchicine derivatives on reversed-phase HPLC systems (207) 247

Inclusion chromatography of alkaloids on cylcodextrin polymer gel beds (208) 109

Fluorodensitometric determination of potato glycoalkaloids on thin-layer chromatograms (210) 121

HPLC determination of vincamine (210) 149

HPLC analysis of pyrrolizidine (*Senecio*) alkaloids using a reversed-phase styrene-divinylbenzene resin column (210) 154

Alkanes
Group separation by reversed-phase HPLC. Rapid determination of remaining alkanes in alkanols (204) 29

Alkane thiol S-methyltransferase
GC method for the quantitative assay of alkane thiol S-methyltransferase (202) 423

Alkanolamines
Quantitative analysis of diastereoisomeric alkanolamines as cyclic boronic acid derivatives (204) 201

Alkanols
Group separation by reversed-phase HPLC. Rapid determination of remaining alkanes in alkanols (204) 29

TLC separation of the lower alkanols as the xanthates (207) 152

Alkene halohydrins
HPLC method for the analysis of alkene bromohydrins and iodohydrins (206) 625

Alkenes
GSC on cation-exchange resins. DARC topological analysis of the behavior of alkenes on nickel ions (207) 115

Alkylating reactions
Study of alkylating reactions catalysed by cation-exchange resins (201) 383

Alkylbenzenes
Reversed-phase LC of isomeric alkylbenzenes (209) 1

Alkylnaphthalenes
Gas chromatography of some C_{13}-C_{16} alkylnaphthalenes on Bentone 34, silicone fluid DC 550 and Apiezon L phases (206) 372

Alkylpyridines
Use of cation-exchange resin for the detection of alkylpyridines in beer (202) 271

Analysis of pyridine bases isolated from a high-temperature coal tar by capillary GC (209) 472

Alkyluracils
Separation of 5-alkyluracils and purine bases in hydrolysates of enzymatically synthesized nucleic acids by ion-pair HPLC (204) 213

Alpha-fetoprotein
Estradiol affinity chromatography. Application to purification of murine alpha-fetoprotein (202) 113

Alprenolol
Separation of enantiomeric amines by ion-pair chromatography (204) 179

Alumina
Hydrophobic chromatography with dynamically coated stationary phases. IV. Anionic surfactant effects on alumina (209) 191

Amadori compounds
Isolation and purification of Amadori compounds by semi-preparative reversed-phase HPLC (206) 186

Amines
Solute-solvent interactions in ion-pair LC of amines on non-polar bonded phases using 1-pentanol and N,N-dimethyloctylamine as organic modifiers (203) 93

Mechanism of ion-pair LC of amines, neutrals, zwitterions and acids using anionic hetaerons (204) 3

N-Alkylation of tertiary aliphatic amines by chloroform, dichloromethane and 1,2-dichloroethane (204) 97

Separation and determination of aliphatic and aromatic amines by HPLC with UV detection (204) 109

Separation of enantiomeric amines by ion-pair chromatography (204) 179

Simple extraction detector for the LC determination of secoverine in biological samples (205) 77

Direct determination of N-nitrosamines in amines using a gas chromatograph-thermal energy analyzer (205) 429

Quantitative analysis of free amine in polyaminoamide and polyamine hardeners by means of gel permeation chromatography (in German) (206) 343

Porous hydrochloride and hydrosulphate forms of poly(vinylpyridine) beads as subtractors for amines and alcohols in reaction GC (206) 485

GC analysis of aromatic amines as N-permethylated derivatives (206) 555

TLC of aromatic amines on ammonium molybdophosphate and tungstophosphate (207) 29

Trace analysis of free amines by GLC (207) 37

GC detection of SO_2, NO_2, amines and halocarbons using an aerosol ionization detector (207) 131

GC separation of amino acid, amine and carboxylic acid enantiomers with α-hydroxy-carboxylic acid esters as chiral stationary phases (207) 252

Chromatographic separation of some biogenic amines on a weakly acidic ion-exchange resin (207) 286

GC separation of enantiomers of amines and amino alcohols on chiral stationary phases (209) 91

Optimal conditions for the coupling of aromatic amines to epoxy-activated Sepharose 6B (209) 363

Aminoacidato cobalt chelates
Chromatographic study of optical resolution. VI. Separation of isomers of facial tris(aminoacidato) mixed ligand chelates with *d*-tartrate and antimony *d*-tartrate adsorbed on an anion-exchange resin (210) 477

Amino acids
Use of solute partition for comparative characterization of several aqueous biphasic polymeric systems (202) 63

Chiral recognition in GC by diamide-diamide solute-solvent interaction (202) 247

Effect of ammonium hydroxide concentration on the recoveries of amino acids during preparation for GLC (202) 283

GC separation of amino acid amide enantiomers on optically active stationary phases (202) 299

Analysis of mimosine and 3-hydroxy-4(1H)-pyridone by HPLC (202) 317

Reversed-phase LC resolution of amino acid enantiomers by derivatization with 2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl isothiocyanate (202) 375

Simple assay method using isotachophoresis for taurine in tissues of the rat (202) 504

Structure-resolution relationship. I. The effect of the alkylamide side-chain of aspartyl derivatives on the resolution of amino acid enantiomers (203) 365

Separation of the optical isomers of amino acids by ligand-exchange chromatography using chemically bonded chiral phases (203) 377

Determination of D-amino acids by deuterium labelling and selected ion monitoring (203) 385

New detection and separation method for amino acids by HPLC (204) 143

Direct resolution of α-amino acid enantiomers by ligand exchange: stereoselection mechanism on silica packings coated with a chiral polymer (204) 185

Practical considerations in the chiral separation of Dns-amino acids by reversed-phase LC using metal chelate additives (205) 325

Preparation of N-chloro-5-dimethylaminonaphthalene-1-sulphonamide and its application as a fluorescence reagent for the detection of phenylthiohydantoinamino acids (205) 349

Analysis of radiomethylated N^{ε}-methyllysines and other methylated amino acids by ion-exchange chromatography with fluorescent detection (205) 478

Determination of mimosine by ion-exchange chromatography (206) 416

HPLC determination of dityrosine in biological samples (206) 621

Ligand-exchange chromatography of racemates. XIII. Micropreparative resolution of L,D-leucine (207) 63

Semiempirical prediction of retention of some ampholytes on a carbon adsorbent (207) 79

New continuous extraction method with a coil planet centrifuge (207) 161

Preparative counter-current chromatography with a rotating coil assembly (207) 171

Resolution of tritium-labelled amino acid racemates by ligand-exchange chromatography. II. L-Hydroxyproline- and L-phenylalanine-modified resins for the resolution of common α-amino acids (207) 231

GC separation of amino acid, amine and carboxylic acid enantiomers with α-hydroxy-carboxylic acid esters as chiral stationary phases (207) 252

Separation of aromatic amino acids on β-cyclodextrin polyurethane resins (208) 35

GLC of amino acids. The heptafluorobutyryl-isobutyl ester derivative of tryptophan (208) 60

Application of a copper tubular electrode as a potentiometric detector in the determination of amino acids by HPLC (209) 29

Use of mixed lithium-sodium buffers and potassium buffers for separation of the common free amino acids in plant material on a two-column system (209) 41

TLC of amino acids and dipeptides on RP-2, RP-8 and RP-18 plates impregnated with dodecylbenzenesulphonic acid (209) 312

Taurine levels in cat plasma (209) 479

Reversed-phase HPLC resolution of non-esterified enantiomeric amino acids by derivatization with 2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl isothiocyanate and 2,3,4-tri-O-acetyl-α-D-arabinopyranosyl isothiocyanate (210) 77

Aminoacyl-tRNA synthetases
Heparin-Sepharose column chromatography as a new method for the purification of aminoacyl-tRNA synthetases (206) 600

Amino alcohols
GC separation of enantiomers of amines and amino alcohols on chiral stationary phases (209) 91

Aminobutyric acid
Optimal conditions for the coupling of aromatic amines to epoxy-activated Sepharose 6B (209) 363

Aminodeoxyalditols
Separation of dinitrophenyl derivatives of amino sugars and aminodeoxyalditols by polyamide TLC (206) 353

Aminodeoxyketones
Isolation and purification of Amadori compounds by semi-preparative reversed-phase HPLC (206) 186

Aminoglycoside antibiotics
Determination of fortimicin A sulfate by HPLC after derivatization with 2,4-dinitrofluorobenzene (208) 357

Aminomethylphenylbicyclo[2.2.2]octanes
Derivatisation and GLC of 3-aminomethyl-2-phenylbicyclo[2.2.2]octanes (206) 83

Aminophenol
Separation of 2-amino-3*H*-phenoxazin-3-one impurity from *o*-aminophenol (209) 113

Aminophenols
Electrochemical detector for micro HPLC and its application to the determination of aminophenol isomers (208) 261

Aminophenoxazinone
Separation of 2-amino-3*H*-phenoxazin-3-one impurity from *o*-aminophenol (209) 113

Aminopropylmethylsiloxane systems
Direct GC resolution of enantiomers on optically active mesophases. V. Model chiral 3-aminopropylmethylsiloxane systems (202) 363

Amino sugars
Separation and quantitative determination of galactosamine and glucosamine at the nanogram level by sulphonyl chloride reaction and HPLC (202) 453

Separation of dinitrophenyl derivatives of amino sugars and aminodeoxyalditols by polyamide TLC (206) 353

Use of a flame thermionic detector in the determination of glucosamine and galactosamine in glycoconjugates by GC (207) 262

Separation of neutral and amino sugars by capillary GC (207) 268

Fluorescamine as a tool for amino sugar analysis (207) 445

Ammonium molybdophosphate
TLC of aromatic amines on ammonium molybdophosphate and tungstophosphate (207) 29

Ammonium tungstophosphate
TLC of aromatic amines on ammonium molybdophosphate and tungstophosphate (207) 29

Amoxicillin
Determination of amoxicillin by HPLC with amperometric detection (210) 531

Amoxycillin
HPLC determination of amoxycillin in pharmaceutical dosage forms (202) 144

Ampholines
Molecular weight distribution of carrier ampholytes for isoelectric focusing (209) 265

Ampholytes
Semiempirical prediction of retention of some ampholytes on a carbon adsorbent (207) 79

Amygdalin
GC enzymic determination of amygdalin (210) 342

Anabasine
Quantitation of major tobacco alkaloids by HPLC (205) 147

Anaestetic drugs
Potential errors in benzoylecgonine and cocaine analysis (206) 193

Anaesthetic drugs
Analytical aspects of barbiturate abuse. Identification of drugs by the effective combination of GLC, HPLC and TLC techniques (204) 275

Detection of some local anaesthetics in horse urine and plasma by GLC (206) 594

Analgesics
Determination of opiates in biological samples by glass capillary GC with electron-capture detection (206) 109

Quantitative determination of naproxen in formulated rat feed by GC-MS and GC-flame-ionization detection (206) 151

Rapid micro-method for the measurement of paracetamol in blood plasma or serum using GLC with flame-ionisation detection (209) 67

Analysis rate
Boxcar chromatography. A new approach to increased analysis rate and very large column plate numbers (203) 3

Increased speed of analysis in directly coupled GC-MS systems. Capillary columns at sub-atmospheric outlet pressures (203) 207

Analytical tool
GLC as an analytical tool in microbiology (203) 337

Aniline
Optimal conditions for the coupling of aromatic amines to epoxy-activated Sepharose 6B (209) 363

Anilines
Pulsed injections of ion interaction reagent applied to the liquid chromatographic separation of 2,6-disubstituted anilines (202) 233

Anisidines
GC analysis of aromatic amines as N-permethylated derivatives (206) 555

Anomer separation
Synthesis of glycosides. Direct HPLC determination of intermediate perbenzylated anomers (in French) (204) 207

Antazoline
Identification of a new metabolite after incubation of N-benzylaniline with rabbit liver microsomes (202) 287

Identification of two *in vitro* metabolic products after liver microsomal incubation of antazoline (210) 350

Anthracycline quinones
Isolation of daunorubicin derivatives by counter-current chromatography with the horizontal flow-through coil planet centrifuge (205) 482

Anthraquinones
Determination of 9,10-anthraquinone and a mixture of 9,10-dihydroxy-1,4-dihydroanthracene and 1,4,5,8-tetrahydroanthraquinone in pulping materials by HPLC (206) 392

Antibacterial agents
Highly specific and sensitive detection method for nitrofurans by TLC (208) 161

Antibiotics
Influence of cations and anions on the separation properties of macroporous polystyrene-type resins for cephalosporins (201) 287

Determination of clindamycin in pharmaceuticals by HPLC using ion-pair formation (202) 99

HPLC determination of amoxycillin in pharmaceutical dosage forms (202) 144

Quantitation of nikkomycins in biological fluids by ion-pair reversed-phase HPLC (204) 313

Isolation of daunorubicin derivatives by counter-current chromatography with the horizontal flow-through coil planet centrifuge (205) 482

Separation and semi-quantitative determination of tetracycline degradation products in tetracycline hydrochloride powders and capsules by TLC (205) 486

Analytical and preparative methods for polymyxin antibiotics using HPLC with a porous styrene-divinylbenzene copolymer packing (206) 563

High-speed gel filtration chromatography of polymers formed by β-lactam antibiotics (207) 425

Reversed-phase ion-pair chromatography of tetracyclines on a LiChrosorb NH_2 column (208) 78

HPLC of polymyxin B sulfate and colistin sulfate (208) 118

Determination of fortimicin A sulfate by HPLC after derivatization with 2,4-dinitrofluorobenzene (208) 357

Purification of a polyenic antibiotic by preparative LC (208) 365

Resolution of linear gramicidins by preparative reversed-phase HPLC (208) 414

Reversed-phase ion-pair LC of tetracyclines (209) 161

Determination of amoxicillin by HPLC with amperometric detection (210) 531

Antibodies
Affinity constants in immunoadsorptive chromatography: their simple determination and application to the selection of eluents in and optimization of the elution process (205) 31

Anticonvulsant drugs
see also anti-epileptic drugs

Antidepressant drugs
N-Alkylation of tertiary aliphatic amines by chloroform, dichloromethane and 1,2-dichloroethane (204) 97

Determination of clomipramine or imipramine and their mono-demethylated metabolites in human blood or plasma by HPLC (204) 303

Reversed-phase LC for the separation of chlorpromazine, imipramine and some of their metabolites (204) 319

Quantitative HPLC assay for the determination of maprotiline and oxaprotiline in human plasma (204) 349

Rapid isothermal GLC determination of tricyclic antidepressants in serum with use of a nitrogen-selective detector (204) 361

Identification of carbamate derivatives formed during chloroform extraction of tricyclic antidepressants from urine (209) 463

Determination of plasma and brain concentrations of trazodone and its metabolite, 1-*m*-chlorophenylpiperazine, by GLC (210) 311

Anti-emetic drugs
Determination of Δ^9-tetrahydrocannabinol in pharmaceutical vehicles by HPLC (206) 117

Anti-epileptic drugs
see also anticonvulsant drugs

Antigens
Affinity constants in immunoadsorptive chromatography: their simple determination and application to the selection of eluents in and optimization of the elution process (205) 31

Abnormal affinity of *Staphylococcus aureus* N-acetyl glucosamine ribitol teichoic acid for wheat-germ agglutinin (209) 323

Antihistamine drugs
Identification of a new metabolite after incubation of N-benzylaniline with rabbit liver microsomes (202) 287

Identification of two *in vitro* metabolic products after liver microsomal incubation of antazoline (210) 350

Antihypertensive drugs
Quantitative analysis of diastereoisomeric alkanolamines as cyclic boronic acid derivatives (204) 201

HPLC analyses of the antihypertensive drug captopril (206) 311

Antineoplastic drugs
see also antitumour drugs and cytostatic drugs

GC enzymic determination of amygdalin (210) 342

Antirheumatic drugs
Quantitative determination of naproxen in formulated rat feed by GC-MS and GC-flame-ionization detection (206) 151

Antitumor drugs
Determination of 5-fluoro-2'-deoxyuridine[6-^{3}H] as an impurity in 5-fluorouracil[6-^{3}H] by HPLC (206) 407

Antitumour drugs
see also cytostatic drugs and antineoplastic drugs

Isolation of daunorubicin derivatives by counter-current chromatography with the horizontal flow-through coil planet centrifuge (205) 482

Antiviral agents
Separation of 2-fluoro-2-deoxyarabino-furanosylpyrimidine nucleosides by HPLC (210) 527

Anxiolytic agents
HPLC determination of grandaxin (a 2,3-benzodiazepine) and its trace impurities (210) 159

Arabinohexosulose
HPLC method for the analysis of D-arabino-2-hexosulose (D-glucosone) (202) 319

Argon
Determination of traces of nitrogen and argon in oxygen by a simple GC method (209) 455

Argon ionization detector
Iodine-doped selective ionization detector for GC (210) 409

Aroclors
Quantitative characterization of polychlorinated biphenyl mixtures (Aroclors 1248, 1254 and 1260) by GC using capillary columns (205) 103

Aromatic compounds
Capillary GC of aromatic compounds found in coal tar fractions (208) 9

Persulphate ion as a reagent for the detection of aromatic compounds containing the NH_2 group using TLC (208) 167

Aromatic hydrocarbons
Electron-capture detection of aromatic hydrocarbons (206) 511

Artifacts
GC determination of water: a source of systematic error introduced by interactions of polar compounds on porous polymer GC columns (203) 271

Potential errors in benzoylecgonine and cocaine analysis (206) 193

Component loss during evaporation-reconstitution of organic environmental samples for GC analysis (207) 203

Halide exchange during GC (208) 388

Recovery of vapours from solid adsorbents (210) 261

Ascorbic acid
HPLC method for the determination of L-ascorbic acid and D-isoascorbic acid (206) 396

Resolution of ascorbic, dehydroascorbic and diketogulonic acids by paired-ion reversed-phase chromatography (207) 449

Automatization
Automated on-line multi-dimensional HPLC techniques for the clean-up and analysis of water-soluble samples (206) 43

B

Barbiturate oxonols
Exclusion chromatography of anionic dyes. Anomalous elution peaks due to reversible aggregation (209) 405

Barbiturates
Analytical aspects of barbiturate abuse. Identification of drugs by the effective

combination of GLC, HPLC and TLC techniques (204) 275

Determination of barbiturates in mouse tissues by HPLC (205) 401

1,5-Bis-(*m*-phenoxyphenyl)-1,1,3,3,5,5-hexaphenyltrisiloxane as a stationary phase in high-temperature GC (207) 345

Simple method for the optimisation of mobile phase composition for HPLC analysis of a multi-component mixture (208) 391

Reversed-phase LC. II. Determination of partition coefficients of barbiturates and urea herbicides (209) 7

Basic drugs
Identification of basic drugs by the TLC profiles of their ninhydrin complexes (206) 267

Benomyl
GLC of selected benzimidazole fungicides by flash-heater methylation with trimethylanilinium hydroxide (210) 83

Benzene
Equilibrium displacement in a chromatographic reactor (204) 35

Benzenes
Liquid crystals. II. Applications of liquid crystals as stationary phases in GLC (206) 361

Benzimidazole fungicides
GLC of selected benzimidazole fungicides by flash-heater methylation with trimethylanilinium hydroxide (210) 83

Benzodiazepines
Determination of eleven benzodiazepine derivatives in acetonic solution by GC using a nitrogen-specific detector. Comparison of five stationary phases (in French) (202) 473

pH-Gradient TLC of benzodiazepines (209) 484

HPLC determination of grandaxin (a 2,3-benzodiazepine) and its trace impurities (210) 159

Benzoic acids
Mechanism of retention of acidic solutes by octadecyl silica using quaternary ammonium pairing ions as ion exchangers (202) 333

Rapid method of analyzing phenolic compounds in *Pinus elliotti* using HPLC (208) 132

Benzopyrene
Comparison of commercial reversed-phase HPLC columns for the separation of benzo[*a*]pyrene diolepoxide-nucleic acid adducts (206) 253

Benzoylecgonine
Potential errors in benzoylecgonine and cocaine analysis (206) 193

Benzylaniline
Identification of a new metabolite after incubation of N-benzylaniline with rabbit liver microsomes (202) 287

Identification of two *in vitro* metabolic products after liver microsomal incubation of antazoline (210) 350

Benzyl esters
Further calibration data for the GC of benzyl esters (210) 146

Beta-adrenergic receptor blocking drugs
Specific and sensitive method for the determination of Tobanum using GC with electron-capture and mass fragmentographic detection (204) 355

Study of the formation of the 2,4-dichlorobenzeneboronate derivative of 1-isopropylaminopropan-2-ol by transboronation (205) 297

Betaine
Determination of betaine in sugar and wine by LC (204) 429

Bile acids
CC and TLC of cholic, deoxycholic and chenodeoxycholic bile acids and their sodium salts (202) 323

Bile acids. LXIII. Relationship between the mobility on reversed-phase HPLC and the structure of bile acids (202) 347

Alternating voltage polarographic detection for HPLC and its evaluation for the analysis of bile acids (204) 131

Bile pigments
HPLC of bile pigments. Application to the determination of unconjugated bilirubin in serum (204) 219

Bilinoid pigments
Phytochrome models. V. Chromatographic detection of solvent adducts of bilinoid pigments (205) 85

Bilirubin
HPLC of bile pigments. Application to the determination of unconjugated bilirubin in serum (204) 219

Binapacryl
Determination and confirmation of binapacryl and dinobuton residues on apples and cucumbers by HPLC (208) 137

Biphasic polymeric systems
Use of solute partition for comparative characterization of several aqueous biphasic polymeric systems (202) 63

Bis(phenoxyphenyl)hexaphenyltrisiloxane

1,5-Bis-(*m*-phenoxyphenyl)-1,1,3,3,5,5-hexaphenyltrisiloxane as a stationary phase in high-temperature GC (207) 345

Blood cells
Surface affinity chromatographic separation of blood cells. II. Influence of mobile phase composition on the chromatographic behaviour of human peripheral blood cells on polyethylene glycol-bonded Sepharose (206) 17

Boronation
Study of the formation of the 2,4-dichlorobenzeneboronate derivative of 1-isopropylaminopropan-2-ol by transboronation (205) 297

Boronic acid derivatives
Quantitative analysis of diastereoisomeric alkanolamines as cyclic boronic acid derivatives (204) 201

Boron thermal-regeneration systems
Selection of anion-exchange resins for boron thermal-regeneration systems (201) 359

Bovine caseins
Separation of bovine caseins using hydrophobic interaction chromatography (210) 105

Boxcar chromatography
Boxcar chromatography. A new approach to increased analysis rate and very large column plate numbers (203) 3

Breakthrough patterns
Ion-exchange phenomena and concomitant pH shifts on the equilibration of reversed-phase packings with ion-pairing reagents (209) 393

Breakthrough volumes
Evaluation of the suitability of selected porous polymers for preconcentration of volatile organic compounds (208) 239

Bromide
Determination of nitrate and bromide in foodstuffs by HPLC (202) 461

Bromohydrins
HPLC method for the analysis of alkene bromohydrins and iodohydrins (206) 625

Bromophenols
Reversed-phase HPLC of red algal bromophenols (206) 573

Bronchodilator drugs
Quantitative analysis of diastereoisomeric alkanolamines as cyclic boronic acid derivatives (204) 201

Butyltin compounds
Determination of butyltin species in water by GC with flame photometric detection (209) 458

Butyric acid
Quantitative GC determination of low-molecular-weight straight-chain carboxylic acids as their *p*-bromophenacyl esters after extractive alkylation in acidic medium (206) 89

C

Cadmium
Separation of metal ions on ion-exchange resin with ethylenediamine functional groups (201) 73

Caffeine
Automated on-line multi-dimensional HPLC techniques for the clean-up and analysis of water-soluble samples (206) 43

Calcium ions
Ion-exchange properties of γ-titanium phosphate and its monosodium forms towards Mg^{2+} and Ca^{2+} ions (201) 175

Possibility for selective removal of calcium ions from Black Sea water using the continuous counter-current ion-exchange softening process with Wofatit KS-10 (201) 377

Calibration
Quantitative analysis of chlorofluorocarbons. Absolute calibration of the electron-capture detector (203) 247

Cannabinoids
Post-column derivatization procedure for the colorimetric analysis of tissue cannabinoids separated by HPLC (205) 303

Use of Amberlite XAD-2 columns for the separation of cannabinoids from *Cannabis* extracts (205) 444

Capillary columns
Properties of untreated and treated glass capillary surfaces and their contribution to solute-stationary phase interaction and film fixation of the stationary liquid (203) 179

Increased speed of analysis in directly coupled GC-MS systems. Capillary columns at sub-atmospheric outlet pressures (203) 207

Glass capillary columns for GC coated with non-extractable films of cyanosilicone rubbers (203) 217

Preparation of wall-coated glass capillary columns after surface roughening by means of amorphous silica. II. Factors affecting the performance of the columns in GC analyses (203) 227

Straightening of the ends of glass capillary columns (205) 1

Evaluation of capillary columns by separation number or plate number (207) 291

Preparation of wall-coated open tubular glass (Pyrex) capillary columns with polar stationary phases, using Superox™-4 as a surface pretreating and deactivating agent (208) 209

Evaluation of bonded methylsilicone rubber as a stationary phase for glass capillary columns (208) 231

Capillary hydrodynamic chromatography
Capillary hydrodynamic chromatography: An investigation into operational characteristics (208) 175

Capillary reaction loops
Glass capillary reaction loops for detection of alcohols, aldehydes and ketones by subtraction (205) 39

Caprolactam
GC analysis of impurities in caprolactam (208) 27

Capsaicin
Determination of capsaicin in tissues and separation of capsaicin analogues by HPLC (208) 41

Captopril
HPLC analyses of the antihypertensive drug captopril (206) 311

Carbamates
Determination of some carbamate pesticides by HPLC with electrochemical detection (208) 295

Gas chromatographic determination of carbaryl residues on stored wheat by on-column transmethylation (208) 305

Identification of carbamate derivatives formed during chloroform extraction of tricyclic antidepressants from urine (209) 463

Reversed-phase HPLC separation of carbofuran and its five metabolites (210) 356

Carbaryl
Gas chromatographic determination of carbaryl residues on stored wheat by on-column transmethylation (208) 305

Carbofuran
Reversed-phase HPLC separation of carbofuran and its five metabolites (210) 356

Carbohydrates
see also sugars and saccharides

Critical study of the alditol acetate method for quantitating small quantities of hexoses and hexosamines in gangliosides (202) 195

HPLC method for the analysis of D-arabino-2-hexosulose (D-glucosone) (202) 319

Synthesis of glycosides. Direct HPLC determination of intermediate perbenzylated anomers (in French) (204) 207

GC of inositols as their hexakis-O-acetyl derivatives (205) 460

Separation of dinitrophenyl derivatives of amino sugars and aminodeoxyalditols by polyamide TLC (206) 353

GC of monosaccharides: formation of a single derivative for each aldose (207) 213

Quantitative GC analysis of sucrose in the presence of sugar oximes using a buffered oximation reagent and glass capillary columns (207) 221

Use of a flame thermionic detector in the determination of glucosamine and galactosamine in glycoconjugates by GC (207) 262

Separation of neutral and amino sugars by capillary GC (207) 268

Capillary GC separation of monosaccharides as their alditol acetates (207) 273

HPLC separation of carbohydrate oligomers (207) 439

GLC analysis of partially methylated alditol acetates on a glass capillary column (208) 96

HPLC separation of methyl glycosides (208) 100

HPLC of hexopyranosides and hexofuranosides (208) 104

Rapid GC analysis of partially methylated aldoses as trimethylsilylated diethyl dithioacetals (209) 299

Improved sugar separation by HPLC using porous microparticle carbohydrate columns (209) 316

Separation of carbohydrates and polyols by a radially compressed HPLC silica column modified with tetraethylenepentamine (210) 45

Analysis of carbohydrates using the mass detector (210) 138

Gas chromatographic determination of 6-deoxyhexoses, pentoses and hexoses of cardiac glycosides. I. GLC on packed columns (in German) (210) 291

GC determination of 6-deoxyhexoses, pentoses and hexoses of cardiac glycosides. II. GLC on glass capillary columns (in German) (210) 337

Carbon monoxide
Method for the analysis of ^{13}Ccarbon monoxide by GC-MS (207) 365

Carbon packings
Novel porous carbon packings in reversed-phase HPLC (202) 3

Carbonyls
GC of simple monocarbonyls in cigarette whole smoke as the benzyloxime derivatives (202) 255

Carboxylases
Chromatography of kidney propionyl-CoA and 3-methylcrotonyl-CoA carboxylases on Cibacron Blue- and Procion Red-substituted agaroses (205) 213

Carboxylic acids
Molecular sorption on ion-exchange resins of aliphatic mono- and dicarboxylic acids (201) 131

Potentiometric detector with a glass electrode for the ion-exchange chromatography of carboxylic acids (202) 37

Crown ether-catalyzed synthesis of diastereoisomeric esters. Enantiomeric purity of mandelic acid via HPLC analysis of its diastereoisomeric 2-octyl esters (202) 478

Behaviour and separation of short-chain dicarboxylic acids by GC on glass capillary columns (in French) (204) 245

Separation of 5-hydroxyindole-3-acetic acid and indole-3-acetic acid in urine by direct injection on a reversed-phase column containing a hydrogen-accepting stationary phase (204) 269

Quantitative GC determination of low-molecular-weight straight-chain carboxylic acids as their *p*-bromophenacyl esters after extractive alkylation in acidic medium (206) 89

GC separation of amino acid, amine and carboxylic acid enantiomers with α-hydroxy-carboxylic acid esters as chiral stationary phases (207) 252

Glass capillary GC of methyl, methyl 2-chloro and chloromethyl esters of C_2-C_{20} *n*-carboxylic acids (209) 96

LC on silica using mobile phases containing aliphatic carboxylic acids. I. Effects of carboxylic acid chain length on separation efficiency and selectivity (209) 211

LC on silica using mobile phases containing aliphatic carboxylic acids. II. Applications in fossil fuel characterization (209) 231

Further calibration data for the GC of benzyl esters (210) 146

Differential frontal analysis of carboxylic acids (210) 373

Carboxylic cation-exchange resins
Acid-base properties of carboxylic cation exchangers (201) 51

Carboxyl polyacrylamide resin
Altered synthesis of carboxylacrylamide which offers improved resolution of venom proteins (206) 368

Carcinogens
Determination of N-nitrosodiethanolamine in cosmetics by GC with electron capture detection (206) 158

Comparison of commercial reversed-phase HPLC columns for the separation of benzo*a*pyrene diolepoxide-nucleic acid adducts (206) 253

Simultaneous quantitation of thioureas in rat plasma by HPLC (207) 281

Cardiac glycosides
Separation of digitalis glycosides by micro HPLC (202) 139

HPLC of cardiac glycosides (204) 293

Gas chromatographic determination of 6-deoxyhexoses, pentoses and hexoses of cardiac glycosides. I. GLC on packed columns (in German) (210) 291

GC determination of 6-deoxyhexoses, pentoses and hexoses of cardiac glycosides. II. GLC on glass capillary columns (in German) (210) 337

Carrier ampholytes
Limiting factors for the resolving power of isoelectric focusing in natural pH gradients (205) 355

Molecular weight distribution of carrier ampholytes for isoelectric focusing (209) 265

Evidence for carrier ampholyte-peptide interactions during somatomedin purification (209) 273

Caseins
Separation of bovine caseins using hydrophobic interaction chromatography (210) 105

Catalysts
Application of GC for investigating slow sorption processes (205) 425

Catalytic dehydrogenation
Equilibrium displacement in a chromatographic reactor (204) 35

Catecholamines
Reversed-phase ion-pair partition chromatography of biogenic catecholamines and their α-methyl homologues with tributylphosphate as stationary phase (202) 223

Automated on-line multi-dimensional HPLC techniques for the clean-up and analysis of water-soluble samples (206) 43

Comparison of the sensitivity of various post-column methods for catecholamine analysis by HPLC (206) 586

Chromatographic separation of some biogenic amines on a weakly acidic ion-exchange resin (207) 286

Effects of L-DOPA on dopamine and norepinephrine concentrations in rat brain assessed by GC (210) 505

Catechols
TLC of chlorinated catechols on a silica gel 60 layer (209) 446

Cephalosporins
Influence of cations and anions on the separation properties of macroporous

polystyrene-type resins for cephalosporins (201) 287

High-speed gel filtration chromatography of polymers formed by β-lactam antibiotics (207) 425

Cetyltrimethylammonium
Ion-exchange phenomena and concomitant pH shifts on the equilibration of reversed-phase packings with ion-pairing reagents (209) 393

Chaconine
Fluorodensitometric determination of potato glycoalkaloids on thin-layer chromatograms (210) 121

Chelating exchange resins
Equation for the evaluation of the protonation constants of complex-forming resins (201) 59

Modelling of chelating resin protonation equilibria (201) 67

Separation of metal ions on ion-exchange resin with ethylenediamine functional groups (201) 73

Chemiluminescence spray cell
Generalized chemiluminescence spray cell for LC detection: selective detection using $O_2(^1\Delta_g)$ (209) 251

Chemotherapeutic drugs
HPLC of polymyxin B sulfate and colistin sulfate (208) 118

HPLC of idoxuridine and related substances on chemically bonded octadecylsilyl silica packings (209) 77

Chenodeoxycholic acid
CC and TLC of cholic, deoxycholic and chenodeoxycholic bile acids and their sodium salts (202) 323

Chiral additives
Practical considerations in the chiral separation of Dns-amino acids by reversed-phase LC using metal chelate additives (205) 325

Chiral derivatization
Reversed-phase LC resolution of amino acid enantiomers by derivatization with 2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl isothiocyanate (202) 375

Chiral eluents
Structure-resolution relationship. I. The effect of the alkylamide side-chain of aspartyl derivatives on the resolution of amino acid enantiomers (203) 365

Chiral recognition
Chiral recognition in GC by diamide-diamide solute-solvent interaction (202) 247

Chiral stationary phases
Direct GC resolution of enantiomers on optically active mesophases. V. Model chiral 3-aminopropylmethylsiloxane systems (202) 363

Direct resolution of α-amino acid enantiomers by ligand exchange: stereoselection mechanism on silica packings coated with a chiral polymer (204) 185

GC separation of amino acid, amine and carboxylic acid enantiomers with α-hydroxycarboxylic acid esters as chiral stationary phases (207) 252

GC separation of enantiomers of amines and amino alcohols on chiral stationary phases (209) 91

Chiral substances
Simultaneous monitoring of light-absorption and optical activity in the LC of chiral substances (202) 239

Chitin
Fluorescamine as a tool for amino sugar analysis (207) 445

Chlorinated catechols
TLC of chlorinated catechols on a silica gel 60 layer (209) 446

Chlorinated guaiacols
TLC of chlorinated guaiacols (207) 154

Chlorinated hydrocarbons
Application of headspace GC to the determination of chlorinated hydrocarbons in waste waters (207) 373

Chlorinated phenols
Identification of chlorinated phenols as degradation products of chlorinated pesticides in biological materials (205) 194

Chlorine-selective detector
Chlorine-selective detector for LC (203) 173

Chlorocruorin
High-performance size exclusion chromatography of sea worm chlorocruorin and other large proteins, viruses and polysaccharides on a TSK G5000 PW preparative column (210) 443

Chlorodimethylaminonaphthalene-sulphonamide
Preparation of N-chloro-5-dimethylaminonaphthalene-1-sulphonamide and its application as a fluorescence reagent for the detection of phenylthiohydantoinamino acids (205) 349

Chlorofluorocarbons
Quantitative analysis of chlorofluorocarbons. Absolute calibration of the electron-capture detector (203) 247

Chloroindoleacetic acid
Reversed-phase HPLC of substituted indoleacetic acids (209) 107

Chlorophenylpiperazine
Determination of plasma and brain concentrations of trazodone and its metabolite, 1-*m*-chlorophenylpiperazine, by GLC (210) 311

Chlorophylls
Preparation and reversed-phase HPLC of chlorophylls (208) 148

Separation of chlorophylls by reversed-phase TLC on oil-impregnated cellulose layers (in German) (208) 156

Chlorpromazine
Reversed-phase LC for the separation of chlorpromazine, imipramine and some of their metabolites (204) 319

Cholestenone
Determination of natural cholestenone in rat adrenal extracts by HPLC (202) 487

Cholic acid
CC and TLC of cholic, deoxycholic and chenodeoxycholic bile acids and their sodium salts (202) 323

Chromatofocusing
Chromatofocusing. III. The properties of a DEAE-agarose anion exchanger and its suitability for protein separations (206) 429

Chromatofocusing. IV. Properties of an agarose polyethyleneimine ion exchanger and its suitability for protein separations (206) 441

Chromosorb
Evaluation of the suitability of selected porous polymers for preconcentration of volatile organic compounds (208) 239

Cigarette smoke
GC of simple monocarbonyls in cigarette whole smoke as the benzyloxime derivatives (202) 255

Cinnamic acid derivatives
Systematic use of tetrahydrofuran in reversed-phase HPLC. An example of the selectivity benefits of ternary mobile phases (204) 263

Cinnamic acids
Rapid method of analyzing phenolic compounds in *Pinus elliotti* using HPLC (208) 132

Circular dichroism spectrophotometer
Use of circular dichroism as a HPLC detector (204) 103

Circulin
Analytical and preparative methods for polymyxin antibiotics using HPLC with a porous styrene-divinylbenzene copolymer packing (206) 563

Clathrate sorbents
High selectivity and efficiency in clathrate chromatography. Generation of absorption sites in the β-$Ni(NCS)_2$(4-methylpyridine)$_4$ phase by the mobile phase components (204) 23

Clindamycin
Determination of clindamycin in pharmaceuticals by HPLC using ion-pair formation (202) 99

Clinoptilolite
Sorption of copper(II) ions on the sodium and the calcium form of zeolites (201) 107

Clomipramine
Determination of clomipramine or imipramine and their mono-demethylated metabolites in human blood or plasma by HPLC (204) 303

Closed-loop strip/trap method
Determination of hydrophilic volatiles in gas-aqueous liquid systems by Grob's closed-loop strip/trap method and standard-addition calibration (204) 421

Coal tar
Capillary GC of aromatic compounds found in coal tar fractions (208) 9

Analysis of pyridine bases isolated from a high-temperature coal tar by capillary GC (209) 472

Cocaine
Potential errors in benzoylecgonine and cocaine analysis (206) 193

Codeine
Determination of opiates in biological samples by glass capillary GC with electron-capture detection (206) 109

Coenzyme A
Direct measurement of free coenzyme A in biological extracts by reversed-phase HPLC (202) 439

Coil assembly
Preparative counter-current chromatography with a rotating coil assembly (207) 171

Coil planet centrifuge
New continuous extraction method with a coil planet centrifuge (207) 161

Colchicine
Retention behavior of selected colchicine derivatives on reversed-phase HPLC systems (207) 247

Colistin
Analytical and preparative methods for polymyxin antibiotics using HPLC with a porous styrene-divinylbenzene copolymer packing (206) 563

Colistin sulphate
HPLC of polymyxin B sulfate and colistin sulfate (208) 118

Column coating
Glass capillary columns for GC coated with non-extractable films of cyanosilicone rubbers (203) 217

Effect of degree of coating on column efficiency in LC (207) 245

Evaluation of bonded methylsilicone rubber as a stationary phase for glass capillary columns (208) 231

Column efficiency
Effect of degree of coating on column efficiency in LC (207) 245

Improved column efficiency in chromatographic analysis of sugars on cation-exchange resins by use of water-triethylamine eluents (210) 279

Column loadability
Column loadability and particle size in preparative LC (209) 432

Column performance
Preparation of wall-coated glass capillary columns after surface roughening by means of amorphous silica. II. Factors affecting the performance of the columns in GC analyses (203) 227

Packing of Toyopearl column for gel filtration. I. Influence of packing velocity on column performance (205) 185

Column preparation
Preparation of wall-coated open tubular glass (Pyrex) capillary columns with polar stationary phases, using Superox™-4 as a surface pretreating and deactivating agent (208) 209

Columns
Batch fluidized ion-exchange column for streams containing suspended particles (201) 319

GC determination of water: a source of systematic error introduced by interactions of polar compounds on porous polymer GC columns (203) 271

Design of and experience in operating technological preparative installations (204) 167

Comparison of commercial reversed-phase HPLC columns for the separation of benzo*a*pyrene diolepoxide-nucleic acid adducts (206) 253

Exclusion column for HPLC of oligonucleotides (206) 493

Peak moments for GC columns with a pressure drop (207) 181

Packing of Toyopearl columns for gel filtration. III. Semi-constant-pressure packing (208) 71

Suitability of TSK-gel Toyopearl packing for the gel permeation chromatographic analysis of dextran (208) 74

Evaluation of capillary GC for thermolabile phenylurea herbicides. Comparison of different columns including fused silica (208) 217

Application of glass-lined stainless-steel columns in HPLC (209) 310

Column switching
Boxcar chromatography. A new approach to increased analysis rate and very large column plate numbers (203) 3

Application of column switching in HPLC to on-line sample preparation for complex separations (204) 65

Column treatment
Properties of untreated and treated glass capillary surfaces and their contribution to solute-stationary phase interaction and film fixation of the stationary liquid (203) 179

Complex formation
Effect of complex formation in the separation of some phenols by ion-exchange chromatography (201) 293

Component loss
Component loss during evaporation-reconstitution of organic environmental samples for GC analysis (207) 203

Computerised chromatography
Design and applications of a microprocessor-controlled system to optimize preparative LC (210) 33

Convicine
Rapid reversed-phase HPLC method for the quantitation of vicine, convicine and related compounds (208) 373

Cooling system
Benefits of a special cooling system to improve precision and accuracy in non-vaporizing on-column injection procedures (203) 193

Copper
Separation of metal ions on ion-exchange resin with ethylenediamine functional groups (201) 73

Copper ions
Sorption of copper(II) ions on the sodium and the calcium form of zeolites (201) 107

Separation of silver-copper mixtures by ion-exchange parametric pumping. I. Total reflux separations (201) 329

Corrosion-resistant gas chromatograph
Monitoring of aggressive components by means of a simple corrosion-resistant all-glass process gas chromatograph with an argon plasma detector (204) 159

Coumarins
Chemotaxonomic study of neutral coumarins in roots of *Citrus* and *Poncirus* by TLC, GLC and HPLC analyses (207) 21

Croton oil
Isolation of phorbol and 4*α*-phorbol from croton oil by droplet counter-current chromatography (206) 421

Crown ethers
Crown ether-catalyzed synthesis of diastereoisomeric esters. Enantiomeric purity of mandelic acid via HPLC analysis of its diastereoisomeric 2-octyl esters (202) 478

Surface silanols in silica-bonded hydrocarbonaceous stationary phases. I. Dual retention mechanism in reversed-phase chromatography (203) 53

Surface silanols in silica-bonded hydrocarbonaceous stationary phases. II. Irregular retention behavior and effect of silanol masking (203) 65

Separation of sulphonic acids by normal-phase LC using crown ethers in the mobile phase (205) 170

Crude oils
Correlation of crude oils and source rocks in the German Molasse basin. Applicability of chromatographic techniques (204) 481

Crufomate
HPLC analysis of technical Ruelene insecticide (206) 181

Cyanides
Determination of cyanides and thiocyanates in water by headspace GC with a nitrogen-phosphorus detector (207) 47

Cyanosilicone rubbers
Glass capillary columns for GC coated with non-extractable films of cyanosilicone rubbers (203) 217

Cyanuric acid
Determination of cyanuric acid by HPLC (207) 454

Cyclic polyether anchor groups
Preparation, characterization and application of ion exchangers with cyclic polyether anchor groups (201) 147

Cyclodextrin polyurethane resins
Separation of aromatic amino acids on β-cyclodextrin polyurethane resins (208) 35

Cyclohexane
Equilibrium displacement in a chromatographic reactor (204) 35

Cyclohexanone oxime
HPLC of cyclohexanone oxime in urine and plasma (210) 360

Cytokinins
Separation of modified bases and ribonucleosides with cytokinin activity using fused silica capillary GC (209) 467

Cytostatic drugs
see also antitumour drugs and antineoplastic drugs

D

DARC topological analysis
GSC on cation-exchange resins. DARC topological analysis of the behavior of alkenes on nickel ions (207) 115

Daunorubicin
Isolation of daunorubicin derivatives by counter-current chromatography with the horizontal flow-through coil planet centrifuge (205) 482

DDT
Characterization of interferences in the analysis of serum for DDT and its metabolites (206) 617

Dead time
Evaluation of dead time in reversed-phase HPLC (in German) (210) 326

Dehydroascorbic acid
Resolution of ascorbic, dehydroascorbic and diketogulonic acids by paired-ion reversed-phase chromatography (207) 449

Dehydrogenases
Applications of immobilised phenylboronic acids as supports for group-specific ligands in the affinity chromatography of enzymes (210) 267

Deoxycholic acid
CC and TLC of cholic, deoxycholic and chenodeoxycholic bile acids and their sodium salts (202) 323

Deoxyhexoses
Gas chromatographic determination of 6-deoxyhexoses, pentoses and hexoses of cardiac glycosides. I. GLC on packed columns (in German) (210) 291

GC determination of 6-deoxyhexoses, pentoses and hexoses of cardiac glycosides. II. GLC on glass capillary columns (in German) (210) 337

Deoxyribonucleic acids
see DNA

Derivative recording
First and second derivative recording of thin-layer chromatograms. Application to the assay of unresolved compounds (204) 51

Derivatization
Critical study of the alditol acetate method for quantitating small quantities of hexoses and hexosamines in gangliosides (202) 195

Reversed-phase LC resolution of amino acid enantiomers by derivatization with 2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl isothiocyanate (202) 375

Preparation of trimethylsilyl-, triethylsilyl- and *tert.* -butyldimethylsilyl enol ethers of

ketosteroids for GC and MS analysis (in German) (202) 483

N-Alkylation of tertiary aliphatic amines by chloroform, dichloromethane and 1,2-dichloroethane (204) 97

Study of the formation of the 2,4-dichlorobenzeneboronate derivative of 1-isopropylaminopropan-2-ol by transboronation (205) 297

Post-column derivatization procedure for the colorimetric analysis of tissue cannabinoids separated by HPLC (205) 303

Derivatisation and GLC of 3-aminomethyl-2-phenylbicyclo[2.2.2]octanes (206) 83

Quantitative GC determination of low-molecular-weight straight-chain carboxylic acids as their *p*-bromophenacyl esters after extractive alkylation in acidic medium (206) 89

Simple micro-acylating technique with gaseous reagents (208) 55

GLC of amino acids. The heptafluorobutyryl-isobutyl ester derivative of tryptophan (208) 60

Microscale preparation of pentafluorobenzyl esters. Electron-capture GC detection of indole-3-acetic acid from plants (209) 413

Reversed-phase HPLC resolution of non-esterified enantiomeric amino acids by derivatization with 2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl isothiocyanate and 2,3,4-tri-O-acetyl-α-D-arabinopyranosyl isothiocyanate (210) 77

Detector response
Electron-capture detection of aromatic hydrocarbons (206) 511

Detectors
Potentiometric detector with a glass electrode for the ion-exchange chromatography of carboxylic acids (202) 37

A potentiometric membrane cell as a detector in LC (203) 153

LC detector for organosulphur compounds based on a ligand-exchange reaction (203) 165

Chlorine-selective detector for LC (203) 173

A d.c. electron-capture detector with separated ionization and capture regions (203) 237

Quantitative analysis of chlorofluorocarbons. Absolute calibration of the electron-capture detector (203) 247

Use of circular dichroism as a HPLC detector (204) 103

New electrochemical cell for HPLC (204) 123

Alternating voltage polarographic detection for HPLC and its evaluation for the analysis of bile acids (204) 131

Simple extraction detector for the LC determination of secoverine in biological samples (205) 77

Solvent segmentation in LC: application to photochemical reaction detectors (205) 229

Quenching or enhancement of the response of the photoionization detector (205) 413

Effect of helium purity on the helium detector response in the saturation region of the detector field intensity (205) 419

Phase-fluctuation optical heterodyne spectrometer as a non-destructive detector for GC (206) 205

GC detection of SO_2, NO_2, amines and halocarbons using an aerosol ionization detector (207) 131

High-efficiency solid scintillation radioactivity detection for HPLC (208) 1

Electrochemical detector for micro HPLC and its application to the determination of aminophenol isomers (208) 261

Comparison of several voltammetric detectors for HPLC (208) 269

Application of a copper tubular electrode as a potentiometric detector in the determination of amino acids by HPLC (209) 29

Generalized chemiluminescence spray cell for LC detection: selective detection using $O_2(^1\Delta_g)$ (209) 251

Analysis of carbohydrates using the mass detector (210) 138

The electron-capture detector. II. Design and performance (210) 193

Study of space charge phenomena in d.c. electron-capture detectors (210) 389

Electronic linearization of a d.c. electron-capture detector via constant-current operation (210) 401

Iodine-doped selective ionization detector for GC (210) 409

Detector stability
Solvent degassing and other factors affecting LC detector stability (204) 115

Deuterium labelling
Determination of D-amino acids by deuterium labelling and selected ion monitoring (203) 385

Dextran
Suitability of TSK-gel Toyopearl packing for the gel permeation chromatographic analysis of dextran (208) 74

Diacetolol
Reversed-phase HPLC with differential pulse polarographic detection for assaying drugs in feed. Stability-indicating assay of diacetolol (202) 405

Diacylglycerols
Reversed-phase TLC of diacylglycerols as their labile dimethylborate esters (209) 49

Diamantane
Reversed-phase chromatography of keto and hydroxy derivatives of adamantane and diamantane (207) 85

Diamminesilver ions
Exchange of hydrated and amminated silver(I) ions in synthetic zeolites X, Y and mordenite (201) 93

Dibenzodioxins
Determination of 2,3,7,8-tetrachlorodibenzo-*p*-dioxin in goat milk and tissues by glass capillary GC and medium resolution mass fragmentography (208) 323

Dibenzothiepines
GC behaviour of dibenzo[*b*,*f*]thiepines (207) 403

Dibromobutanediol
Separation of meso and racemic 2,3-dibromobutane-1,4-diol by GC (205) 387

Dicarboxylic acids
Molecular sorption on ion-exchange resins of aliphatic mono- and dicarboxylic acids (201) 131

Behaviour and separation of short-chain dicarboxylic acids by GC on glass capillary columns (in French) (204) 245

Dichlorobenzophenone
GLC of the isomers of dichlorobenzophenone, di(chlorophenyl)methane and 1,1-di(chlorophenyl)ethane (206) 147

Dichloromethane
Oxygen doping of carrier gas in the determination of dichloromethane in liquid foodstuffs by headspace GC with electron-capture detection (206) 589

Di(chlorophenyl)ethane
GLC of the isomers of dichlorobenzophenone, di(chlorophenyl)methane and 1,1-di(chlorophenyl)ethane (206) 147

Di(chlorophenyl)methane
GLC of the isomers of dichlorobenzophenone, di(chlorophenyl)methane and 1,1-di(chlorophenyl)ethane (206) 147

Dicyclo ethers
HPLC of *cis*- and *trans*-en-in-dicyclo ethers (spiro ethers) in *Matricaria chamomilla* L. flowers and in chamomile extracts (209) 110

Dieldrin
Identification of dieldrin derivatives (209) 101

Diethylthiocarbamoyl pyridyl disulphide
Investigation of the isolation of a mixed disulphide, diethylthiocarbamoyl 2-pyridyl disulphide by analytical and preparative HPLC (208) 141

Digitalis glycosides
Separation of digitalis glycosides by micro HPLC (202) 139

Diglycerides
Analytical and structural study of some food emulsifiers by HPLC and off-line MS (204) 397

General method for the purification of lipids for surface pressure studies. Application to monogalactosyldiglyceride (207) 387

HPLC method for quantitation of free acids, mono-, di- and triglycerides using an IR detector (209) 61

Dihalobenzene isomers
GC separation of some dihalobenzene isomers and some substituted monohalobenzene isomers (206) 376

Dihexyloxyazoxybenzene
Liquid crystals as stationary phases in GLC. III. Thermodynamic measurements on decane-dihexyloxyazoxybenzene and decane-diheptyl-oxyazoxybenzene systems (205) 239

Liquid crystals as stationary phases in GLC. IV. Thermodynamic measurements on benzene-dihexyloxyazoxybenzene, benzene-di-heptyloxyazoxybenzene, carbon tetrachloride-dihexyloxyazoxybenzene and carbon tetrachloride-diheptyloxyazoxybenzene systems (205) 251

Dihydroxydihydroanthracene
Determination of 9,10-anthraquinone and a mixture of 9,10-dihydroxy-1,4-dihydroanthracene and 1,4,5,8-tetrahydroanthraquinone in pulping materials by HPLC (206) 392

Diisopropyl ether
Mixed retention mechanisms in GLC. III. Determination of the gas-liquid adsorption coefficient for diisopropyl ether on *n*-octadecane (206) 1

Diketogulonic acid
Resolution of ascorbic, dehydroascorbic and diketogulonic acids by paired-ion reversed-phase chromatography (207) 449

Dimethyloctylamine
Solute-solvent interactions in ion-pair LC of amines on non-polar bonded phases using 1-pentanol and N,N-dimethyloctylamine as organic modifiers (203) 93

Dimethyl sulphate
GC method for the determination of dimethyl sulfate in air (206) 381

Dinobuton
Determination and confirmation of binapacryl and dinobuton residues on apples and cucumbers by HPLC (208) 137

Diolein
Degradation of triglycerides in GC capillaries: studies by reversing the column (205) 289

Diosgenin
HPLC method for the determination of diosgenin in plants (206) 169

Dipeptides
GC separation of enantiomers of some dipeptides on an optically active stationary phase (202) 302

Reversed-phase and soap TLC of dipeptides (207) 412

TLC of amino acids and dipeptides on RP-2, RP-8 and RP-18 plates impregnated with dodecylbenzenesulphonic acid (209) 312

Diphenylmethane diisocyanate
Trace analysis of isocyanates in industrial atmospheres using GC and electron-capture detection (208) 313

Diquat
Off-line combination of isotachophoresis and MS (209) 306

Direct coupling
Direct coupling of a micro high-performance liquid chromatograph and a mass spectrometer (206) 245

Distribution equilibria
Distribution equilibria of solvent components in reversed-phase LC columns and relationship with the mobile phase volume (207) 299

Disulphides
Investigation of the isolation of a mixed disulphide, diethylthiocarbamoyl 2-pyridyl disulphide by analytical and preparative HPLC (208) 141

Separation of the oxidized and reduced forms of dithiothreitol and 2-mercaptoethanol by reversed-phase HPLC. Application of the method to biological extracts and to the determination of disulphides (210) 522

Dithiophosphates
High-voltage paper electrophoresis of zinc dialkyl- and diaryldithiophosphate lubricating oil additives (207) 407

Dithiothreitol
Separation of the oxidized and reduced forms of dithiothreitol and 2-mercaptoethanol by reversed-phase HPLC. Application of the method to biological extracts and to the determination of disulphides (210) 522

Dityrosine
HPLC determination of dityrosine in biological samples (206) 621

DNA sequencing
Thermally stabilized very thin (0.02-0.3 mm) polyacrylamide gels for electrophoresis (202) 45

Donnan exclusion chromatography
Donnan exclusion chromatography. I. Theory and application to the separation of phosphorus oxoanions or metal cations (201) 259

Dopamine
Comparison of the sensitivity of various post-column methods for catecholamine analysis by HPLC (206) 586

Effects of L-DOPA on dopamine and norepinephrine concentrations in rat brain assessed by GC (210) 505

Dopants
Oxygen doping of carrier gas in the determination of dichloromethane in liquid foodstuffs by headspace GC with electron-capture detection (206) 589

Doping control
Reversed-phase HPLC detection of pemoline in doping control (202) 131

Dothistromin
Determination of dothistromin by quantitative reversed-phase TLC (209) 117

Drug-protein binding
Improvement of the parallel flow dialysis technique for the detection of drug-binding proteins in column effluents (210) 461

Drug-protein binding parameters
Retention data methods for the determination of drug-protein binding parameters by HPLC (204) 285

Drugs
Analysis of drugs encountered in fatal poisonings using HPLC and fluorescence detection (208) 113

Drugs of abuse
Investigation of the GLC separation of phencyclidine and some heterocyclic analogues by combined GLC-MS (202) 309

Analytical aspects of barbiturate abuse. Identification of drugs by the effective combination of GLC, HPLC and TLC techniques (204) 275

Preadsorbent TLC. III. Direct detection of quinine in urine as a presumptive test for heroin (206) 196

Drug stability
Reversed-phase HPLC with differential pulse polarographic detection for assaying drugs in feed. Stability-indicating assay of diacetolol (202) 405

Dyes
Extraction and analysis of disperse dyes on polyester textiles (208) 47

Exclusion chromatography of anionic dyes. Anomalous elution peaks due to reversible aggregation (209) 405

Use of reversed-phase TLC for the identification of black inks from board felt markers and ball-point pens (209) 441

Ion-pair extraction and ion-pair adsorption TLC for rapid identification of ionic food dyes (210) 113

E

Eburnane alkaloids
HPLC of eburnane alkaloids. I. Separation on reversed phases (204) 341

HPLC of eburnane alkaloids. II. Separations on silica (205) 57

HPLC determination of vincamine (210) 149

Ecdysteroids
HPLC of ecdysteroids and their 3-epi, 3-dehydro and 26-hydroxy derivatives (205) 139

Edible oils
Determination of phenolic plastic additives in edible oils by TLC (204) 385

Electrochemical detector
New electrochemical cell for HPLC (204) 123

Electrochemical detector for micro HPLC and its application to the determination of aminophenol isomers (208) 261

Electrokinetic streaming currents
Effect of the components of the chromatographic system on the electrokinetic streaming current generated in LC columns (210) 11

Electron-capture detection
Electron-capture detection of aromatic hydrocarbons (206) 511

Electron-capture detector
A d.c. electron-capture detector with separated ionization and capture regions (203) 237

Quantitative analysis of chlorofluorocarbons. Absolute calibration of the electron-capture detector (203) 247

The electron-capture detector. II. Design and performance (210) 193

Study of space charge phenomena in d.c. electron-capture detectors (210) 389

Electronic linearization of a d.c. electron-capture detector via constant-current operation (210) 401

Electronic linearization
Electronic linearization of a d.c. electron-capture detector via constant-current operation (210) 401

Electrophoretic separators
Continuous-flow, support-free, electrophoretic separation in thin layers: towards large-scale operation (202) 157

Eluent selection
Affinity constants in immunoadsorptive chromatography: their simple determination and application to the selection of eluents in and optimization of the elution process (205) 31

Emulsifiers
Analytical and structural study of some food emulsifiers by HPLC and off-line MS (204) 397

Enantiomer separation
Simultaneous monitoring of light-absorption and optical activity in the LC of chiral substances (202) 239

Chiral recognition in GC by diamide-diamide solute-solvent interaction (202) 247

GC separation of amino acid amide enantiomers on optically active stationary phases (202) 299

GC separation of enantiomers of some dipeptides on an optically active stationary phase (202) 302

Direct separation of α-hydroxycarboxylic acid ester enantiomers by GC with optically active copper(II) complexes (202) 305

Direct GC resolution of enantiomers on optically active mesophases. V. Model chiral 3-aminopropylmethylsiloxane systems (202) 363

Reversed-phase LC resolution of amino acid enantiomers by derivatization with 2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl isothiocyanate (202) 375

Crown ether-catalyzed synthesis of diastereoisomeric esters. Enantiomeric purity of mandelic acid via HPLC analysis of its diastereoisomeric 2-octyl esters (202) 478

Structure-resolution relationship. I. The effect of the alkylamide side-chain of aspartyl derivatives on the resolution of amino acid enantiomers (203) 365

Separation of the optical isomers of amino acids by ligand-exchange chromatography using chemically bonded chiral phases (203) 377

Separation of enantiomeric amines by ion-pair chromatography (204) 179

Direct resolution of α-amino acid enantiomers by ligand exchange: stereoselection mechanism on silica packings coated with a chiral polymer (204) 185

Practical considerations in the chiral separation of Dns-amino acids by reversed-phase LC using metal chelate additives (205) 325

GC separation of α-hydroxycarboxylic acid ester enantiomers using amino acid derivatives as chiral stationary phase (206) 143

Ligand-exchange chromatography of racemates. XIII. Micropreparative resolution of L,D-leucine (207) 63

Resolution of tritium-labelled amino acid racemates by ligand-exchange chromatography. II. L-Hydroxyproline- and L-phenylalanine-modified resins for the resolution of common α-amino acids (207) 231

GC separation of amino acid, amine and carboxylic acid enantiomers with α-hydroxy-carboxylic acid esters as chiral stationary phases (207) 252

Direct separation of some alcohol enantiomers by GC with amino acid derivatives as chiral stationary phases (208) 404

GC separation of enantiomers of amines and amino alcohols on chiral stationary phases (209) 91

Reversed-phase HPLC resolution of non-esterified enantiomeric amino acids by derivatization with 2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl isothiocyanate and 2,3,4-tri-O-acetyl-α-D-arabinopyranosyl isothiocyanate (210) 77

Chromatographic study of optical resolution. VI. Separation of isomers of facial tris(aminoacidato) mixed ligand chelates with *d*-tartrate and antimony *d*-tartrate adsorbed on an anion-exchange resin (210) 477

En-in-dicyclo ethers
HPLC of *cis*- and *trans*-en-in-dicyclo ethers (spiro ethers) in *Matricaria chamomilla* L. flowers and in chamomile extracts (209) 110

Enkephalins
Development of a combined HPLC-fluorometric quantitative assay for enkephalins (202) 500

Enzymes
see also proteins

Fluorimetric assay for ornithine decarboxylase by HPLC (202) 107

Efficient lipoxygenase assay by GLC (202) 313

GC method for the quantitative assay of alkane thiol S-methyltransferase (202) 423

Simplified LC assay for epoxide hydrolase (202) 447

Chromatography of kidney propionyl-CoA and 3-methylcrotonyl-CoA carboxylases on Cibacron Blue- and Procion Red-substituted agaroses (205) 213

Use of triazine dyes in the affinity chromatographic purification of alkaline phosphatase from calf intestine (206) 521

Heparin-Sepharose column chromatography as a new method for the purification of aminoacyl-tRNA synthetases (206) 600

Separation of α- and β-trypsin by hydrophobic interaction chromatography (207) 55

HPLC of pectic enzymes (207) 99

Isolation of human urine urokinase by column chromatography on sawdust and some properties of the enzyme obtained (210) 180

Determination of 5'-nucleotidase by automated ion-exchange column chromatography (210) 186

Applications of immobilised phenylboronic acids as supports for group-specific ligands in the affinity chromatography of enzymes (210) 267

Study of the molecular interaction between lysozyme and heparin and application in affinity chromatography (210) 469

Enzymatic reactions on TLC plates. III. Phospholipase C hydrolysis of phosphatidylcholine and separation of the products on a single plate; an assay method for the enzyme (210) 544

Epiclindamycin
Determination of clindamycin in pharmaceuticals by HPLC using ion-pair formation (202) 99

Epinephrine
Comparison of the sensitivity of various post-column methods for catecholamine analysis by HPLC (206) 586

Epoxide hydrolase
Simplified LC assay for epoxide hydrolase (202) 447

Epoxy resin hardeners
Quantitative analysis of free amine in polyaminoamide and polyamine hardeners by means of gel permeation chromatography (in German) (206) 343

Equilibrium constants
Linear relationship between the logarithm of the equilibrium constants and the logarithm of the LC separation factors for tautomers obtained in different solvents (202) 187

Equilibrium displacement
Equilibrium displacement in a chromatographic reactor (204) 35

Ergot alkaloids
Isolation and separation of new natural lactam alkaloids of ergot by HPLC (207) 139

Erythorbic acid
HPLC method for the determination of L-ascorbic acid and D-isoascorbic acid (206) 396

Erythrocytes
Surface affinity chromatographic separation of blood cells. II. Influence of mobile phase

composition on the chromatographic behaviour of human peripheral blood cells on polyethylene glycol-bonded Sepharose (206) 17

Erythropoietin
Preparative capillary isotachophoresis: a micro method for the purification of erythropoietin (210) 319

Essential oils
New method for quantitative essential oil analysis (203) 325

Use of Pluronic F68 glass capillary columns for the analysis of essential oil samples (204) 59

Chromatographic investigation of Jasmin absolutes (205) 367

Estrogens
see oestrogens

Ethylenebisdithiocarbamate
Reversed-phase HPLC determination of ethylenethiourea in ethylenebisdithiocarbamate formulations (in French) (206) 125

Ethylene halohydrins
GC methods for the analysis of the halohydrins of ethylene and propylene (205) 165

Ethylenethiourea
Reversed-phase HPLC determination of ethylenethiourea in ethylenebisdithiocarbamate formulations (in French) (206) 125

Euglobals
Isolation and characterization of euglobals from *Eucalyptus globulus* Labill. by preparative reversed-phase LC (208) 347

Exchange isotherms
Binary and ternary cation exchange in zeolites (201) 21

Exclusion columns
Exclusion column for HPLC of oligonucleotides (206) 493

Explosives
Trace analysis of explosives at the low picogram level by silica capillary column GLC with electron-capture detection (208) 83

Extraction detector
Simple extraction detector for the LC determination of secoverine in biological samples (205) 77

Extraction interface
On-line LC-MS of ion pairs (203) 139

F

Fatty acids
GC study of variations in the amounts of fatty acids in millet seeds (in French) (204) 377

Preparation of sphingolipid fatty acid methyl esters for determination by GLC (205) 281

HPLC method for quantitation of free acids, mono-, di- and triglycerides using an IR detector (209) 61

Feed
Reversed-phase HPLC with differential pulse polarographic detection for assaying drugs in feed. Stability-indicating assay of diacetolol (202) 405

Fermentation end-products
Wall-coated open-tubular capillary column system for GC analysis of neutral and acidic fermentation end-products (208) 279

Ferricrocin
Preparative-scale HPLC of ferricrocin, a microbial product (209) 103

Fetoprotein
Estradiol affinity chromatography. Application to purification of murine alpha-fetoprotein (202) 113

First derivative recording
First and second derivative recording of thin-layer chromatograms. Application to the assay of unresolved compounds (204) 51

Flavanol
HPLC separation of flavan-4α-ol and flavan-4β-ol epimers (205) 470

Flavonoids
Rapid method of analyzing phenolic compounds in *Pinus elliotti* using HPLC (208) 132

Study of PC and TLC of phenolic substances by statistical methods (209) 377

Fluidized ion-exchange columns
Batch fluidized ion-exchange column for streams containing suspended particles (201) 319

Fluorescamine
Fluorescamine as a tool for amino sugar analysis (207) 445

Fluorescein
Study of factors which influence the TLC behaviour of compounds. III. TLC of fluorescein on pH-gradient layers (in German) (205) 457

Fluorescence reagents
Preparation of N-chloro-5-dimethylaminonaphthalene-1-sulphonamide and its application as

a fluorescence reagent for the detection of phenylthiohydantoinamino acids (205) 349

Fluorodeoxyarabinofuranosylpyrimidines
Separation of 2-fluoro-2-deoxyarabinofuranosylpyrimidine nucleosides by HPLC (210) 527

Fluorouracil
Determination of 5-fluoro-2'-deoxyuridine[6-^{3}H] as an impurity in 5-fluorouracil[6-^{3}H] by HPLC (206) 407

Food colors
Separation and detection of synthetic food colors by ion-pair HPLC (210) 168

Food contamination
Determination of nitrate and bromide in foodstuffs by HPLC (202) 461

Single-ion monitoring of styrene in foods by coupled MS-automatic headspace GC (205) 434

Food dyes
Ion-pair extraction and ion-pair adsorption TLC for rapid identification of ionic food dyes (210) 113

Food emulsifiers
Analytical and structural study of some food emulsifiers by HPLC and off-line MS (204) 397

Food packages
Identification of residual organic compounds in food packages (210) 93

Food packings
Quantitative analysis of residual solvents in food packaging printed films by capillary GC with multiple headspace extraction (204) 371

Determination of phenolic plastic additives in edible oils by TLC (204) 385

Foods
Quantitative chromatographic analysis of lipids in foods (203) 397

Formaldehyde
Preparation and evaluation of 3-aminopropyltriethoxysilane-treated silica for HPLC of low-molecular-weight aldehydes as their lutidine derivatives (202) 55

Formate
Evaluation of triethylammonium phosphate and formate-acetonitrile mixtures as eluents for high-performance gel permeation chromatography (202) 211

Fortimicin A sulphate
Determination of fortimicin A sulfate by HPLC after derivatization with 2,4-dinitrofluorobenzene (208) 357

Fossil fuel
LC on silica using mobile phases containing aliphatic carboxylic acids. II. Applications in fossil fuel characterization (209) 231

Free radicals
Integral HPLC-electron spin resonance spectrometer for *in situ* studies of thermal and photochemical free radical reactions. Separation of phenoxy, hydrazyl, nitroxide and silyl-substituted semiquinone radicals (206) 139

Frontal analysis
Differential frontal analysis of carboxylic acids (210) 373

Fructose
Quantitative GC analysis of sucrose in the presence of sugar oximes using a buffered oximation reagent and glass capillary columns (207) 221

Fuberidazole
GLC of selected benzimidazole fungicides by flash-heater methylation with trimethylanilinium hydroxide (210) 83

Fuels
LC on silica using mobile phases containing aliphatic carboxylic acids. II. Applications in fossil fuel characterization (209) 231

Fumarate
Effect of hydrogen bonding on the selectivity of anion-exchange equilibria (201) 85

Fungicides
Reversed-phase HPLC determination of ethylenethiourea in ethylenebisdithiocarbamate formulations (in French) (206) 125

Determination and confirmation of binapacryl and dinobuton residues on apples and cucumbers by HPLC (208) 137

Determination of triadimefon in grape juice and wine using capillary GC (208) 409

GLC of selected benzimidazole fungicides by flash-heater methylation with trimethylanilinium hydroxide (210) 83

Furosemide
Retention data methods for the determination of drug-protein binding parameters by HPLC (204) 285

G

Galactomannan
High-performance size-exclusion chromatography of guar gum (206) 410

Galactosamine
Separation and quantitative determination of galactosamine and glucosamine at the

nanogram level by sulphonyl chloride reaction and HPLC (202) 453

Separation of dinitrophenyl derivatives of amino sugars and aminodeoxyalditols by polyamide TLC (206) 353

Use of a flame thermionic detector in the determination of glucosamine and galactosamine in glycoconjugates by GC (207) 262

Gangliosides
Critical study of the alditol acetate method for quantitating small quantities of hexoses and hexosamines in gangliosides (202) 195

Gas chromatograph
Monitoring of aggressive components by means of a simple corrosion-resistant all-glass process gas chromatograph with an argon plasma detector (204) 159

Controlled environment portable gas chromatograph for *in situ* aircraft or balloon-borne applications (205) 271

Gas oils
Determination of the total sulphur content in gas oils with a flame photometric detector (204) 153

Gasoline
Rapid hydrocarbon group analysis of gasoline by HPLC (208) 429

Gel substances
Pore size distribution analysis of gel substances by size exclusion chromatography (206) 449

Glass ampules
Inadvertent formation of polynuclear aromatic hydrocarbons by the flame sealing of glass ampules (202) 294

Glass coating
Separation of proteins on silicone-coated porous glass (207) 276

Glucagon
In situ silylation of an octadecylsilyl-silica stationary phase applied to the analysis of peptides, such as secretin and glucagon (207) 421

Glucosamine
Separation and quantitative determination of galactosamine and glucosamine at the nanogram level by sulphonyl chloride reaction and HPLC (202) 453

Separation of dinitrophenyl derivatives of amino sugars and aminodeoxyalditols by polyamide TLC (206) 353

Use of a flame thermionic detector in the determination of glucosamine and galactosamine in glycoconjugates by GC (207) 262

Glucose
Quantitative GC analysis of sucrose in the presence of sugar oximes using a buffered oximation reagent and glass capillary columns (207) 221

Glucosone
HPLC method for the analysis of D-arabino-2-hexosulose (D-glucosone) (202) 319

Glycerophospholipids
Sensitive GC determination of certain glycerophosphates by use of the flame photometric detector. Application to glycerophospholipids (206) 387

Glycidyl methacrylate copolymers
Reactive polymers. XL. Study of the internal structure of thermally treated polymeric sorbents based on glycidyl methacrylate copolymers (210) 255

Glycinebetaine
Estimation of quaternary ammonium and tertiary sulphonium compounds by thin-layer electrophoresis and scanning reflectance densitometry (210) 550

Glycoalkaloids
Fluorodensitometric determination of potato glycoalkaloids on thin-layer chromatograms (210) 121

Glycoconjugates
Use of a flame thermionic detector in the determination of glucosamine and galactosamine in glycoconjugates by GC (207) 262

Glycoproteins
Separation of neutral and amino sugars by capillary GC (207) 268

Preparative capillary isotachophoresis: a micro method for the purification of erythropoietin (210) 319

Glycosides
Separation of digitalis glycosides by micro HPLC (202) 139

Synthesis of glycosides. Direct HPLC determination of intermediate perbenzylated anomers (in French) (204) 207

HPLC of cardiac glycosides (204) 293

HPLC separation of methyl glycosides (208) 100

Glycosphingolipids
Critical study of the alditol acetate method for quantitating small quantities of hexoses and hexosamines in gangliosides (202) 195

Gossypol
HPLC analysis of gossypol (206) 606

Gradient elution
Use of gradient elution for rapid selection of isocratic conditions in reversed-phase HPLC (205) 13

Gradient synthesizer
Construction and evaluation of a programmable gradient liquid chromatograph (210) 419

Gramicidins
Resolution of linear gramicidins by preparative reversed-phase HPLC (208) 414

Grandaxin
HPLC determination of grandaxin (a 2,3-benzodiazepine) and its trace impurities (210) 159

Granulation-inhibiting agents
Isolation and characterization of euglobals from *Eucalyptus globulus* Labill. by preparative reversed-phase LC (208) 347

Granulocytes
Surface affinity chromatographic separation of blood cells. II. Influence of mobile phase composition on the chromatographic behaviour of human peripheral blood cells on polyethylene glycol-bonded Sepharose (206) 17

Graphitized carbon black
Acid-washed graphitized carbon black and its application in the separation of some acids (204) 255

Graphitized carbon black columns for HPLC (206) 35

Group separation
Group separation by reversed-phase HPLC. Rapid determination of remaining alkanes in alkanols (204) 29

Guaiacols
TLC of chlorinated guaiacols (207) 154

Phenolic constituents in pulp mill process streams (208) 287

Guanine nucleotides
Sensitive spray reagent for guanine nucleotides (208) 164

Guar gum
High-performance size-exclusion chromatography of guar gum (206) 410

H

Haemoglobin
Improved method of separating and quantitating hemoglobin compositions by isoelectric focusing (209) 451

Halide exchange
Halide exchange during GC (208) 388

Hallucinogenic compounds
Quantitative analysis of psilocybin and psilocin in *Psilocybe baeocystis* (Singer and Smith) by HPLC and by TLC (207) 379

Determination of psilocybin in *Psilocybe semilanceata* using HPLC on a silica column (210) 163

Halobenzenes
GC separation of some dihalobenzene isomers and some substituted monohalobenzene isomers (206) 376

Halocarbons
Quantitative analysis of chlorofluorocarbons. Absolute calibration of the electron-capture detector (203) 247

Calibration method for the GC analysis of halocarbons in atmospheric samples using permeation tubes and an electron-capture detector (204) 445

Controlled environment portable gas chromatograph for *in situ* aircraft or balloon-borne applications (205) 271

GC detection of SO_2, NO_2, amines and halocarbons using an aerosol ionization detector (207) 131

Halohydrins
GC methods for the analysis of the halohydrins of ethylene and propylene (205) 165

HPLC method for the analysis of alkene bromohydrins and iodohydrins (206) 625

Halophenols
Reversed-phase HPLC of red algal bromophenols (206) 573

Hardeners
Quantitative analysis of free amine in polyaminoamide and polyamine hardeners by means of gel permeation chromatography (in German) (206) 343

Harpagide
GLC determination of the iridoid content in *Harpagophytum procumbens* D.C. (209) 476

Heart cutting
Use of heart cutting in GC: a review (203) 19

Helium ionization detector
Effect of helium purity on the helium detector response in the saturation region of the detector field intensity (205) 419

Heparin
Study of the molecular interaction between lysozyme and heparin and application in affinity chromatography (210) 469

Herbicides
Determination of triazine herbicides in various crops by capillary GC with thermionic detection (202) 431

HPLC determination of the behaviour of metribuzin during some water treatment processes (in German) (204) 461

Separation of multi-component mixtures of N-dealkylated degradation products of *s*-triazine herbicides and their parent compounds by glass capillary GLC (205) 464

Determination of hydrophobic parameters for pyridazinone herbicides by liquid-liquid partition and reversed-phase HPLC (206) 7

Evaluation of capillary GC for thermolabile phenylurea herbicides. Comparison of different columns including fused silica (208) 217

Reversed-phase ion-pair HPLC of nitrophenols (208) 331

Reversed-phase LC. II. Determination of partition coefficients of barbiturates and urea herbicides (209) 7

TLC of phenoxyacetic acid herbicides (209) 329

Hexofuranosides
HPLC of hexopyranosides and hexofuranosides (208) 104

Hexopyranosides
HPLC of hexopyranosides and hexofuranosides (208) 104

Hexosamines
Critical study of the alditol acetate method for quantitating small quantities of hexoses and hexosamines in gangliosides (202) 195

Separation and quantitative determination of galactosamine and glucosamine at the nanogram level by sulphonyl chloride reaction and HPLC (202) 453

Separation of neutral and amino sugars by capillary GC (207) 268

Hexoses
Critical study of the alditol acetate method for quantitating small quantities of hexoses and hexosamines in gangliosides (202) 195

Gas chromatographic determination of 6-deoxyhexoses, pentoses and hexoses of cardiac glycosides. I. GLC on packed columns (in German) (210) 291

GC determination of 6-deoxyhexoses, pentoses and hexoses of cardiac glycosides. II. GLC on glass capillary columns (in German) (210) 337

Hippuric acid
Measurement of exposure to xylenes by separate determination of *m*- and *p*-methylhippuric acids in urine (210) 346

Histamine
Simple method for the simultaneous determination of histamine, polyamines and histone H1 (205) 155

Histones
Simple method for the simultaneous determination of histamine, polyamines and histone H1 (205) 155

Hormones
Method for quantitative determination of the four known juvenile hormones in insect tissue using GC-MS (204) 231

Identification of 3-indoleacetic acid in *Pinus sylvestris* L. by GC-MS, and quantitative analysis by ion-pair reversed-phase LC with spectrofluorimetric detection (205) 125

HPLC of ecdysteroids and their 3-epi, 3-dehydro and 26-hydroxy derivatives (205) 139

Rapid method for the determination of abscisic acid applied to apple leaves (205) 199

Separation of some estrogens by TLC (205) 223

Analysis of plant hormones using HPLC (208) 124

Microscale preparation of pentafluorobenzyl esters. Electron-capture GC detection of indole-3-acetic acid from plants (209) 413

Reversed-phase ion-pair HPLC of the plant hormones indolyl-3-acetic and abscisic acid (209) 489

Humic acid
Humic acid characterization of Colombian soil by disc electrophoresis and IR spectroscopy following gel filtration (209) 421

Hydrocarbons
Application of GC on glass capillary columns to the analysis of hydrocarbon pollutants from the Amoco Cadiz oil spill (203) 279

GC-MS identification of geochemically significant isoalkane hydrocarbons (204) 491

Liquid crystals as the stationary phase in GC. IV. Evaluation of the combination of a separation column and an electric field liquid crystal column (206) 223

High-resolution GC with liquid crystal glass capillaries. I. Separation of hydrocarbon isomers on nematic mesophases (in German) (206) 463

High-resolution GC with liquid crystal glass capillaries. II. Separation of hydrocarbon isomers on smectic A and C modifications (in German) (206) 475

Electron-capture detection of aromatic hydrocarbons (206) 511

Component loss during evaporation-reconstitution of organic environmental samples for GC analysis (207) 203

Application of headspace GC to the determination of chlorinated hydrocarbons in waste waters (207) 373

Effect of adsorption on the reproducibility of retention indices of hydrocarbons in capillary GLC (209) 15

Hydrocarbons, gasoline-range
Rapid hydrocarbon group analysis of gasoline by HPLC (208) 429

Hydrodynamic chromatography
Capillary hydrodynamic chromatography: An investigation into operational characteristics (208) 175

Hydrodynamic parameters
Calculation of hydrodynamic parameters of random coil polymers from size exclusion chromatography and comparison with parameters by conventional methods (210) 433

Hydrogen bonding
Effect of hydrogen bonding on the selectivity of anion-exchange equilibria (201) 85

Hydrogen phosphide
Method of trapping low levels of phosphine at ambient temperature for GC analysis (206) 384

Hydrogen treatment
Effects of hydrogen treatment on typical GC supports (210) 133

Hydrophilic volatiles
Determination of hydrophilic volatiles in gas-aqueous liquid systems by Grob's closed-loop strip/trap method and standard-addition calibration (204) 421

Hydrophobic parameters
Determination of hydrophobic parameters for pyridazinone herbicides by liquid-liquid partition and reversed-phase HPLC (206) 7

Hydroxybutyric acid
Acid-washed graphitized carbon black and its application in the separation of some acids (204) 255

Hydroxycarboxylic acids
Direct separation of α-hydroxycarboxylic acid ester enantiomers by GC with optically active copper(II) complexes (202) 305

GC separation of α-hydroxycarboxylic acid ester enantiomers using amino acid derivatives as chiral stationary phase (206) 143

Hydroxycholecalciferols
Separation of functional hydroxymetabolites of vitamin D_3 by TLC (209) 337

Hydroxyindoleacetic acid
Determination of 5-hydroxyindoleacetic acid in urine by HPLC: a fully automated method (204) 225

Separation of 5-hydroxyindole-3-acetic acid and indole-3-acetic acid in urine by direct injection on a reversed-phase column containing a hydrogen-accepting stationary phase (204) 269

Reversed-phase HPLC of substituted indoleacetic acids (209) 107

Hydroxyketones
Identification and determination of α-hydroxyketones in a reaction mixture (206) 541

Hydroxyketosteroids
Preparation of trimethylsilyl-, triethylsilyl- and *tert.*-butyldimethylsilyl enol ethers of ketosteroids for GC and MS analysis (in German) (202) 483

Hydroxypyridone
Analysis of mimosine and 3-hydroxy-4(1H)-pyridone by HPLC (202) 317

Hydroxyquinoline
Fluorescence detection of 8-hydroxyquinoline and some of its halogenated derivatives using post-column derivatization in HPLC (210) 536

I

Idoxuridine
HPLC of idoxuridine and related substances on chemically bonded octadecylsilyl silica packings (209) 77

Imipramine
N-Alkylation of tertiary aliphatic amines by chloroform, dichloromethane and 1,2-dichloroethane (204) 97

Determination of clomipramine or imipramine and their mono-demethylated metabolites in human blood or plasma by HPLC (204) 303

Reversed-phase LC for the separation of chlorpromazine, imipramine and some of their metabolites (204) 319

Immunoglobulins
Application of CM-Sephadex C-50 for the production of immunoglobulins (201) 281

Immunosuppressive agents
Shortened purification procedure of a spleen-derived immunosuppressive peptide (206) 177

Indoleacetic acid
Separation of 5-hydroxyindole-3-acetic acid and indole-3-acetic acid in urine by direct injection on a reversed-phase column containing a hydrogen-accepting stationary phase (204) 269

Identification of 3-indoleacetic acid in *Pinus sylvestris* L. by GC-MS, and quantitative analysis by ion-pair reversed-phase LC with spectrofluorimetric detection (205) 125

Analysis of plant hormones using HPLC (208) 124

Reversed-phase HPLC of substituted indoleacetic acids (209) 107

Microscale preparation of pentafluorobenzyl esters. Electron-capture GC detection of indole-3-acetic acid from plants (209) 413

Reversed-phase ion-pair HPLC of the plant hormones indolyl-3-acetic and abscisic acid (209) 489

Indole alkaloids
Determination of vincamine in human plasma using automated HPLC (204) 335

Inclusion chromatography of alkaloids on cylcodextrin polymer gel beds (208) 109

Injection procedures
Benefits of a special cooling system to improve precision and accuracy in non-vaporizing on-column injection procedures (203) 193

Injection system
Flow injection system as a post-column reaction detector for HPLC of phosphinate, phosphonate and orthophosphate (206) 501

Injection techniques
Variable-volume sample valve for HPLC (208) 67

Improved microlitre syringe for GLC (209) 437

Inks
Use of reversed-phase TLC for the identification of black inks from board felt markers and ball-point pens (209) 441

Inositols
GC of inositols as their hexakis-O-acetyl derivatives (205) 460

Insecticides
HPLC analysis of technical Ruelene insecticide (206) 181

Gas chromatographic determination of carbaryl residues on stored wheat by on-column transmethylation (208) 305

Identification of dieldrin derivatives (209) 101

Insect juvenile hormones
Method for quantitative determination of the four known juvenile hormones in insect tissue using GC-MS (204) 231

Insect venoms
Isotachophoretic characterization of stinging insect venoms (209) 121

Instrumental parameters
Optimization of the instrumental parameters of a combined liquid chromatograph-mass spectrometer, coupled by an interface for direct liquid introduction. II. Nebulization of liquids by diaphragms (203) 117

Iodoacetylene
GLC study of the thermodynamics of 1-iodoacetylene-Lewis donor molecular associations (209) 345

Iodohydrins
HPLC method for the analysis of alkene bromohydrins and iodohydrins (206) 625

Ion binding
Application of ion-selectivity predictions to the analysis of ion binding by gels (201) 5

Ion-exchange columns
Batch fluidized ion-exchange column for streams containing suspended particles (201) 319

Ion-exchange-desolvation mechanism
Ion-exchange-desolvation mechanism on octadecyl silica using anionic hydrophobic pairing ions (209) 175

Ion-exchange equilibria
Effect of hydrogen bonding on the selectivity of anion-exchange equilibria (201) 85

Ion-exchange kinetics
Ion-exchange kinetics in selective systems (201) 43

Ion-exchange kinetics in systems with non-linear equilibrium isotherms. Sorption of uranium(VI) on strong acid cation exchangers (201) 113

Ion-exchange process limits
Estimation of ion-exchange process limits by selectivity calculations. II. Regeneration curves (201) 35

Ion-exchange resins
Binary and ternary cation exchange in zeolites (201) 21

Acid-base properties of carboxylic cation exchangers (201) 51

Separation of metal ions on ion-exchange resin with ethylenediamine functional groups (201) 73

Exchange of hydrated and amminated silver(I) ions in synthetic zeolites X, Y and mordenite (201) 93

Examination of radiation damage to ion exchangers by diffuse reflectance spectroscopy (201) 121

Preparation, characterization and application of ion exchangers with cyclic polyether anchor groups (201) 147

Self-diffusion of the sodium ion in the monosodium and disodium forms of α- and γ-zirconium phosphate (201) 167

Ion-exchange properties of γ-titanium phosphate and its monosodium forms towards Mg^{2+} and Ca^{2+} ions (201) 175

Simple method for the determination of low cation-exchange capacity and the titration of cation exchangers by constant-current coulometry (201) 193

Preparation and ion chromatographic application of surface-sulphonated cation exchangers (201) 253

Selection of anion-exchange resins for boron thermal-regeneration systems (201) 359

Study of alkylating reactions catalysed by cation-exchange resins (201) 383

Thermal studies on the dehydration of polystyrene-divinylbenzene-type ion exchangers (205) 263

Application of macroporous anion-exchange resins AN-221 and AN-211 as sorbents for GC (206) 239

Chromatofocusing. III. The properties of a DEAE-agarose anion exchanger and its suitability for protein separations (206) 429

Chromatofocusing. IV. Properties of an agarose polyethyleneimine ion exchanger and its suitability for protein separations (206) 441

GSC on cation-exchange resins. DARC topological analysis of the behavior of alkenes on nickel ions (207) 115

Ion-exchange selectivity
Application of ion-selectivity predictions to the analysis of ion binding by gels (201) 5

Ion interaction reagent
Pulsed injections of ion interaction reagent applied to the liquid chromatographic separation of 2,6-disubstituted anilines (202) 233

Ionization detector
Iodine-doped selective ionization detector for GC (210) 409

Ionogenic substances
pH method for the interpretation of HPLC behaviour with non-aqueous polar mobile phases (209) 149

Ion-pair chromatography
Mechanistic study on ion-pair reversed-phase chromatography (201) 211

Ion pairs
Formation of ion pairs under conditions employed in reversed-phase chromatography (201) 201

On-line LC-MS of ion pairs (203) 139

Ions
HPLC of ions (201) 225

Ipsenol
LC determination of submicrogram amounts of ipsenol and ipsdienol, pheromone components of *Ips paraconfusus* Lanier (202) 148

Iridoids
Straight-phase and reversed-phase HPLC separations of valepotriate isomers and homologues (205) 206

GLC determination of the iridoid content in *Harpagophytum procumbens* D.C. (209) 476

Isoalkanes
GC-MS identification of geochemically significant isoalkane hydrocarbons (204) 491

Isoascorbic acid
HPLC method for the determination of L-ascorbic acid and D-isoascorbic acid (206) 396

Isocyanates
Trace analysis of isocyanates in industrial atmospheres using GC and electron-capture detection (208) 313

Isomer separation
Separation of the diastereoisomers of pyroglutamylhistidyl-3,3-dimethylprolineamide by ligand-exchange chromatography (204) 195

Quantitative analysis of diastereoisomeric alkanolamines as cyclic boronic acid derivatives (204) 201

Straight-phase and reversed-phase HPLC separations of valepotriate isomers and homologues (205) 206

Separation of meso and racemic 2,3-dibromobutane-1,4-diol by GC (205) 387

GC of inositols as their hexakis-O-acetyl derivatives (205) 460

HPLC separation of flavan-4α-ol and flavan-4β-ol epimers (205) 470

Derivatisation and GLC of 3-aminomethyl-2-phenylbicyclo[2.2.2]octanes (206) 83

GLC of the isomers of dichlorobenzophenone, di(chlorophenyl)methane and 1,1-di(chlorophenyl)ethane (206) 147

Separation and determination of the *cis-trans* isomers of the vitamin A esters by HPLC (in German) (206) 319

Liquid crystals. II. Applications of liquid crystals as stationary phases in GLC (206) 361

GC separation of some dihalobenzene isomers and some substituted monohalobenzene isomers (206) 376

High-resolution GC with liquid crystal glass capillaries. I. Separation of hydrocarbon isomers on nematic mesophases (in German) (206) 463

High-resolution GC with liquid crystal glass capillaries. II. Separation of hydrocarbon isomers on smectic A and C modifications (in German) (206) 475

GC analysis of aromatic amines as N-permethylated derivatives (206) 555

Electrochemical detector for micro HPLC and its application to the determination of aminophenol isomers (208) 261

Reversed-phase LC of isomeric alkylbenzenes (209) 1

Feasibility study of high-temperature liquid crystals in wall-coated open-tubular columns (209) 87

Separation of isomeric thiohydantoins by TLC (210) 188

Isoprenoids
GC-MS identification of geochemically significant isoalkane hydrocarbons (204) 491

Isopropylaminopropanol
Study of the formation of the 2,4-dichlorobenzeneboronate derivative of 1-isopropylaminopropan-2-ol by transboronation (205) 297

Isotachophoresis-mass spectrometry
Off-line combination of isotachophoresis and MS (209) 306

J

Jasmin
Chromatographic investigation of Jasmin absolutes (205) 367

Juvenile hormones
Method for quantitative determination of the four known juvenile hormones in insect tissue using GC-MS (204) 231

K

Kallikrein
Use of biospecific adsorbents with polysaccharide spacers in affinity chromatography (210) 67

Katahdinone
HPLC determination of stress-induced sesquiterpenes of the potato (*Solanum tuberosum*) (210) 365

Keto acids
GC analysis of α-keto acids in aqueous solution as the O-(2,3,4,5,6-pentafluorobenzyl)-oximes of their methyl esters (202) 93

Ketones
Glass capillary reaction loops for detection of alcohols, aldehydes and ketones by subtraction (205) 39

Reversed-phase chromatography of keto and hydroxy derivatives of adamantane and diamantane (207) 85

Ketoses
GC of monosaccharides: formation of a single derivative for each aldose (207) 213

Ketosteroids
Preparation of trimethylsilyl-, triethylsilyl- and *tert.* -butyldimethylsilyl enol ethers of ketosteroids for GC and MS analysis (in German) (202) 483

Kinases
Applications of immobilised phenylboronic acids as supports for group-specific ligands in the affinity chromatography of enzymes (210) 267

Kinetin
Analysis of plant hormones using HPLC (208) 124

L

Labetalol
Quantitative analysis of diastereoisomeric alkanolamines as cyclic boronic acid derivatives (204) 201

Lactam alkaloids
Isolation and separation of new natural lactam alkaloids of ergot by HPLC (207) 139

Lactam antibiotics
High-speed gel filtration chromatography of polymers formed by β-lactam antibiotics (207) 425

Lactic acid
Direct separation of α-hydroxycarboxylic acid ester enantiomers by GC with optically active copper(II) complexes (202) 305

Lanthanide metal chelates
Lanthanide metal chelates as selective complexing sorbents for GC (203) 29

Lanthanides
Separation of lanthanides by capillary tube isotachophoresis using complex-forming equilibria (205) 95

Lecithin
Sensitive and highly reproducible quantitative fluorescent TLC visualization technique for lecithin and sphingomyelin (208) 170

Leucine
Ligand-exchange chromatography of racemates. XIII. Micropreparative resolution of L,D-leucine (207) 63

Optimal conditions for the coupling of aromatic amines to epoxy-activated Sepharose 6B (209) 363

Lewis donors
GLC study of the thermodynamics of 1-iodoacetylene-Lewis donor molecular associations (209) 345

Limonene hydroperoxides
Semipreparative HPLC separation of singlet oxygen derived limonene hydroperoxides (202) 127

Lipids
Quantitative chromatographic analysis of lipids in foods (203) 397

Response and linearity of different lipid compounds when analyzed by TLC with flame ionization detection (205) 339

General method for the purification of lipids for surface pressure studies. Application to monogalactosyldiglyceride (207) 387

Sensitive and highly reproducible quantitative fluorescent TLC visualization technique for lecithin and sphingomyelin (208) 170

HPLC method for quantitation of free acids, mono-, di- and triglycerides using an IR detector (209) 61

Lipoic acid
HPLC of lipoic acid and analogues (208) 129

Liposomes
Hydrophobic affinity partition of liposomes in aqueous two-phase systems (205) 189

Lipoxygenase
Efficient lipoxygenase assay by GLC (202) 313

Liquid chromatography-mass spectrometry
Optimization of the instrumental parameters of a combined liquid chromatograph-mass spectrometer, coupled by an interface for direct liquid introduction. II. Nebulization of liquids by diaphragms (203) 117

Studies of combined LC-MS with a moving-belt interface (203) 131

On-line LC-MS of ion pairs (203) 139

Liquid crystals
GLC separation of methoxy-substituted quinones on nematic liquid crystals (202) 75

Correlation between GC and IR spectroscopic behaviour in nematic phases (202) 369

Liquid crystals as stationary phases in GLC. III. Thermodynamic measurements on decane-dihexyloxyazoxybenzene and decane-diheptyl-oxyazoxybenzene systems (205) 239

Liquid crystals as stationary phases in GLC. IV. Thermodynamic measurements on benzene-dihexyloxyazoxybenzene, benzene-di-heptyloxyazoxybenzene, carbon tetrachloride-dihexyloxyazoxybenzene and carbon tetrachloride-diheptyloxyazoxybenzene systems (205) 251

Liquid crystals as the stationary phase in GC. IV. Evaluation of the combination of a separation column and an electric field liquid crystal column (206) 223

Liquid crystals. II. Applications of liquid crystals as stationary phases in GLC (206) 361

High-resolution GC with liquid crystal glass capillaries. I. Separation of hydrocarbon isomers on nematic mesophases (in German) (206) 463

High-resolution GC with liquid crystal glass capillaries. II. Separation of hydrocarbon isomers on smectic A and C modifications (in German) (206) 475

Effect of the amount of liquid crystal and type of support on some properties of the liquid crystalline stationary phase-support system (207) 333

Feasibility study of high-temperature liquid crystals in wall-coated open-tubular columns (209) 87

Low-solubility substances
Combination of IR and TLC for the identification of slightly soluble substances (202) 151

Lubimin
HPLC determination of stress-induced sesquiterpenes of the potato (*Solanum tuberosum*) (210) 365

Lubricants
High-voltage paper electrophoresis of zinc dialkyl- and diaryldithiophosphate lubricating oil additives (207) 407

Lymphocytes
Surface affinity chromatographic separation of blood cells. II. Influence of mobile phase composition on the chromatographic behaviour of human peripheral blood cells on polyethylene glycol-bonded Sepharose (206) 17

Lyosphosphatidylserine
Measurement of ethanolamine- and serine-containing phospholipids by HPLC with

fluorescence detection of their Dns derivatives (208) 339

Lysozyme
Study of the molecular interaction between lysozyme and heparin and application in affinity chromatography (210) 469

M

Magnesium ions
Ion-exchange properties of γ-titanium phosphate and its monosodium forms towards Mg^{2+} and Ca^{2+} ions (201) 175

Maleate
Effect of hydrogen bonding on the selectivity of anion-exchange equilibria (201) 85

Malic acid
Rapid determination of oxalic acid by reversed-phase HPLC (210) 540

Mandelic acid
Crown ether-catalyzed synthesis of diastereoisomeric esters. Enantiomeric purity of mandelic acid via HPLC analysis of its diastereoisomeric 2-octyl esters (202) 478

Maprotiline
Quantitative HPLC assay for the determination of maprotiline and oxaprotiline in human plasma (204) 349

Mass detector
Analysis of carbohydrates using the mass detector (210) 138

Mass spectrometry
MS as a separation technique. Analysis of involatile samples (203) 109

Mass transfer
High-performance gel permeation chromatography with silica microspheres: mass-transfer dispersion and polydispersity of polystyrene (206) 215

Medicinal white oils
Quantitative trace analysis of polycyclic aromatic hydrocarbons by HPLC and low-temperature fluorimetry in Shpolskii matrices at 4.2°K. Application to medicinal white oils (204) 135

Mellitin
Isotachophoretic characterization of stinging insect venoms (209) 121

Menaquinones
Resolution of menaquinones (vitamin K_2) by HPLC (206) 333

Mercaptoethanol
Separation of the oxidized and reduced forms of dithiothreitol and 2-mercaptoethanol by reversed-phase HPLC. Application of the method to biological extracts and to the determination of disulphides (210) 522

Metal cations
Donnan exclusion chromatography. I. Theory and application to the separation of phosphorus oxoanions or metal cations (201) 259

Metal chelate additives
Practical considerations in the chiral separation of Dns-amino acids by reversed-phase LC using metal chelate additives (205) 325

Metal chelates
Lanthanide metal chelates as selective complexing sorbents for GC (203) 29

Metal chelate affinity chromatography. II. Group separation of mono- and dinucleotides (206) 164

Metal ions
Separation of metal ions on ion-exchange resin with ethylenediamine functional groups (201) 73

Concentration and separation of Ni^{2+}, Cu^{2+} and Co^{2+} by back extraction chromatography using Lix 64N and cationic resins. I. Concentration of Ni^{2+} (201) 297

Separation of silver-copper mixtures by ion-exchange parametric pumping. I. Total reflux separations (201) 329

Thermal fractionation by moving-bed ion exchange: principles and experiments (201) 343

Separation of lanthanides by capillary tube isotachophoresis using complex-forming equilibria (205) 95

Methacrylic acid
Acid-base properties of carboxylic cation exchangers (201) 51

Methadone
Determination of underivatized CNS-stimulants and methadone in urinary extracts by glass capillary GC (207) 148

Methoxyquinones
GLC separation of methoxy-substituted quinones on nematic liquid crystals (202) 75

Methylcrotonyl-CoA carboxylase
Chromatography of kidney propionyl-CoA and 3-methylcrotonyl-CoA carboxylases on Cibacron Blue- and Procion Red-substituted agaroses (205) 213

Methyl glycosides
HPLC separation of methyl glycosides (208) 100

Methylhippuric acids
Measurement of exposure to xylenes by separate determination of *m*- and *p*-methylhippuric acids in urine (210) 346

Methyllysines
Analysis of radiomethylated N^{ε}-methyllysines and other methylated amino acids by ion-exchange chromatography with fluorescent detection (205) 478

Methylsilicone rubber
Evaluation of bonded methylsilicone rubber as a stationary phase for glass capillary columns (208) 231

Metoprolol
Separation of enantiomeric amines by ion-pair chromatography (204) 179

Metribuzin
HPLC determination of the behaviour of metribuzin during some water treatment processes (in German) (204) 461

Microbiology
GLC as an analytical tool in microbiology (203) 337

Microlitre syringe
Improved microlitre syringe for GLC (209) 437

Microprocessor-controlled system
Design and applications of a microprocessor-controlled system to optimize preparative LC (210) 33

Mimosine
Analysis of mimosine and 3-hydroxy-4(1H)-pyridone by HPLC (202) 317

Determination of mimosine by ion-exchange chromatography (206) 416

Mobile phase composition
Search for optimal eluent composition for isocratic LCC (201) 241

Evaluation of triethylammonium phosphate and formate-acetonitrile mixtures as eluents for high-performance gel permeation chromatography (202) 211

Structure-resolution relationship. I. The effect of the alkylamide side-chain of aspartyl derivatives on the resolution of amino acid enantiomers (203) 365

Systematic use of tetrahydrofuran in reversed-phase HPLC. An example of the selectivity benefits of ternary mobile phases (204) 263

Use of gradient elution for rapid selection of isocratic conditions in reversed-phase HPLC (205) 13

Retention parameters and eluent composition in TLC and HPLC of aromatic nitro compounds in reversed-phase systems (205) 451

Surface affinity chromatographic separation of blood cells. II. Influence of mobile phase composition on the chromatographic behaviour of human peripheral blood cells on polyethylene glycol-bonded Sepharose (206) 17

Simple method for the optimisation of mobile phase composition for HPLC analysis of a multi-component mixture (208) 391

Column LC on dynamically modified silica. I (209) 203

LC on silica using mobile phases containing aliphatic carboxylic acids. I. Effects of carboxylic acid chain length on separation efficiency and selectivity (209) 211

LC on silica using mobile phases containing aliphatic carboxylic acids. II. Applications in fossil fuel characterization (209) 231

Effect of the components of the chromatographic system on the electrokinetic streaming current generated in LC columns (210) 11

Simple relationships concerning mobile and stationary phases in normal- and reversed-phase chromatography (210) 211

HPLC of nucleobases, nucleosides and nucleotides. I. Mobile phase composition for the separation of charged solutes by reversed-phase chromatography (210) 229

HPLC of nucleobases, nucleosides and nucleotides. II. Mobile phase composition for the separation of charged solutes by ion-exchange chromatography (210) 241

Mobile phase parameters
HPLC of amino acids, peptides and proteins. XXVII. Solvophobic considerations for the separation of unprotected peptides on chemically bonded hydrocarbonaceous stationary phases (203) 349

Mobile phases
GC with a vapour mobile phase at the finite concentration of sorbate. I. The sorption effect (202) 21

GC with a vapour mobile phase at the finite concentration of sorbate. II. Temperature effects and the characteristics of preparative separations (202) 29

Mobile phase volume
Distribution equilibria of solvent components in reversed-phase LC columns and relationship with the mobile phase volume (207) 299

Molecular associations
GLC study of the thermodynamics of 1-iodoacetylene-Lewis donor molecular associations (209) 345

Molecular sorption
Molecular sorption on ion-exchange resins of aliphatic mono- and dicarboxylic acids (201) 131

Molecular-weight distribution
Characterisation of "deasphaltened" petroleum residues by gel permeation chromatography (203) 313

Determination of molecular-weight distribution of polymers by microcolumn exclusion chromatography (207) 145

Modified method of universal calibration for the determination of molecular weight and molecular-weight distribution (208) 253

Molecular weight distribution of carrier ampholytes for isoelectric focusing (209) 265

Monocarbonyls
GC of simple monocarbonyls in cigarette whole smoke as the benzyloxime derivatives (202) 255

Monocarboxylic acids
Molecular sorption on ion-exchange resins of aliphatic mono- and dicarboxylic acids (201) 131

Monogalactosyldiglyceride
General method for the purification of lipids for surface pressure studies. Application to monogalactosyldiglyceride (207) 387

Monoglycerides
Analytical and structural study of some food emulsifiers by HPLC and off-line MS (204) 397

HPLC method for quantitation of free acids, mono-, di- and triglycerides using an IR detector (209) 61

Monohalobenzene isomers
GC separation of some dihalobenzene isomers and some substituted monohalobenzene isomers (206) 376

Monosaccharides
GC of monosaccharides: formation of a single derivative for each aldose (207) 213

Quantitative GC analysis of sucrose in the presence of sugar oximes using a buffered oximation reagent and glass capillary columns (207) 221

Use of a flame thermionic detector in the determination of glucosamine and galactosamine in glycoconjugates by GC (207) 262

Capillary GC separation of monosaccharides as their alditol acetates (207) 273

Gas chromatographic determination of 6-deoxyhexoses, pentoses and hexoses of cardiac glycosides. I. GLC on packed columns (in German) (210) 291

GC determination of 6-deoxyhexoses, pentoses and hexoses of cardiac glycosides. II. GLC on glass capillary columns (in German) (210) 337

Monoterpenes
Analysis of nutmeg oil using chromatographic methods (204) 391

Determination of monoterpene hydrocarbons in the atmosphere (209) 293

Mordenite
Exchange of hydrated and amminated silver(I) ions in synthetic zeolites X, Y and mordenite (201) 93

Morphine
Determination of opiates in biological samples by glass capillary GC with electron-capture detection (206) 109

Moving-bed ion exchange
Thermal fractionation by moving-bed ion exchange: principles and experiments (201) 343

Moving-belt interface
Studies of combined LC-MS with a moving-belt interface (203) 131

Muramic acid
Separation of dinitrophenyl derivatives of amino sugars and aminodeoxyalditols by polyamide TLC (206) 353

Mycophenolic acid
Quantitative UV densitometric and fluoro-densitometric analysis of mycophenolic acid on thin-layer plates (in German) (207) 430

Mycotoxins
HPLC of the mycotoxin sterigmatocystin and its application to the analysis of mouldy rice for sterigmatocystin (207) 435

HPLC analysis of the mycotoxin secalonic acid D and its application to biological fluids (208) 17

Myosin
Further observations on the chromatography of myosin preparations on hydroxyapatite (207) 395

N

Naphthylamines
GC analysis of aromatic amines as N-permethylated derivatives (206) 555

Naproxen
Quantitative determination of naproxen in formulated rat feed by GC-MS and GC-flame-ionization detection (206) 151

Nebulization
Optimization of the instrumental parameters of a combined liquid chromatograph-mass spectrometer, coupled by an interface for direct liquid introduction. II. Nebulization of liquids by diaphragms (203) 117

Neuraminic acids
GLC and MS of methyl ethers of methyl N-acetyl-N-methyl-β-D-neuraminate methyl glycoside (210) 487

Neuroleptic drugs
GC behaviour of dibenzo[*b,f*]thiepines (207) 403

Neutrals
Mechanism of ion-pair LC of amines, neutrals, zwitterions and acids using anionic hetaerons (204) 3

Nickel
Separation of metal ions on ion-exchange resin with ethylenediamine functional groups (201) 73

Nickel ions
Concentration and separation of Ni^{2+}, Cu^{2+} and Co^{2+} by back extraction chromatography using Lix 64N and cationic resins. I. Concentration of Ni^{2+} (201) 297

GSC on cation-exchange resins. DARC topological analysis of the behavior of alkenes on nickel ions (207) 115

Nicotine
Quantitation of major tobacco alkaloids by HPLC (205) 147

Nifedipine
HPLC of nifedipine, its metabolites and photochemical degradation products (210) 516

Nifuroxazide
Determination of nifuroxazide in biological fluids by automated HPLC with large-volume injection (204) 329

Nikkomycins
Quantitation of nikkomycins in biological fluids by ion-pair reversed-phase HPLC (204) 313

$Ni(NCS)_2(4\text{-methylpyridine})_4$
High selectivity and efficiency in clathrate chromatography. Generation of absorption sites in the β-$Ni(NCS)_2(4\text{-methylpyridine})_4$ phase by the mobile phase components (204) 23

Ninhydrin complexes
Identification of basic drugs by the TLC profiles of their ninhydrin complexes (206) 267

Nitrate
Determination of nitrate and bromide in foodstuffs by HPLC (202) 461

Nitrite
Determination of nitrite in human, cow and market milks by GLC with electron-capture detection (206) 531

Nitroalkanols
Separation and identification of 2-nitroalkanol-1 compounds by GC (206) 549

Nitro compounds
Retention parameters and eluent composition in TLC and HPLC of aromatic nitro compounds in reversed-phase systems (205) 451

Nitrofurans
Highly specific and sensitive detection method for nitrofurans by TLC (208) 161

Nitrogen
Determination of traces of nitrogen and argon in oxygen by a simple GC method (209) 455

Nitrogen dioxide
GC detection of SO_2, NO_2, amines and halocarbons using an aerosol ionization detector (207) 131

Nitrogen heterocyclics
GC investigation of raw wastewater from coal gasification (204) 439

Nitrophenols
Reversed-phase ion-pair HPLC of nitrophenols (208) 331

Nitrophenoxypropanediol
Simplified LC assay for epoxide hydrolase (202) 447

Nitrosamines
Direct determination of N-nitrosamines in amines using a gas chromatograph-thermal energy analyzer (205) 429

Nitrosodiethanolamine
Determination of N-nitrosodiethanolamine in cosmetics by GC with electron capture detection (206) 158

Non-volatile samples
MS as a separation technique. Analysis of involatile samples (203) 109

Norepinephrine
Comparison of the sensitivity of various post-column methods for catecholamine analysis by HPLC (206) 586

Effects of L-DOPA on dopamine and norepinephrine concentrations in rat brain assessed by GC (210) 505

Nucleic acid adducts
Comparison of commercial reversed-phase HPLC columns for the separation of benzo[*a*]pyrene diolepoxide-nucleic acid adducts (206) 253

Nucleic acids
Chromatographic desalting, deproteinization and concentration of nucleic acids on columns of polytetrafluoroethylene (202) 391

Nucleobases
Dynamic cation-exchange systems for rapid separations of nucleobases and nucleosides by HPLC (209) 369

HPLC of nucleobases, nucleosides and nucleotides. I. Mobile phase composition for

the separation of charged solutes by reversed-phase chromatography (210) 229

HPLC of nucleobases, nucleosides and nucleotides. II. Mobile phase composition for the separation of charged solutes by ion-exchange chromatography (210) 241

Nucleoside phosphates
Chromatography of nucleoside phosphates on DEAE-Spheron 1000 with ethanol-ammonium formate as eluent (201) 265

Nucleosides
Simultaneous analysis of nucleosides and nucleotides by HPLC (205) 202

Application of simultaneous UV-radioactivity HPLC to the study of intermediary metabolism. I. Purine nucleotides, nucleosides and bases (209) 283

Dynamic cation-exchange systems for rapid separations of nucleobases and nucleosides by HPLC (209) 369

HPLC of nucleobases, nucleosides and nucleotides. I. Mobile phase composition for the separation of charged solutes by reversed-phase chromatography (210) 229

HPLC of nucleobases, nucleosides and nucleotides. II. Mobile phase composition for the separation of charged solutes by ion-exchange chromatography (210) 241

Separation of 2-fluoro-2-deoxyarabino-furanosylpyrimidine nucleosides by HPLC (210) 527

Nucleotidase
Determination of 5'-nucleotidase by automated ion-exchange column chromatography (210) 186

Nucleotides
Zwitterion-pair chromatography of nucleotides and related species (203) 85

Simultaneous analysis of nucleosides and nucleotides by HPLC (205) 202

Metal chelate affinity chromatography. II. Group separation of mono- and dinucleotides (206) 164

Exclusion column for HPLC of oligonucleotides (206) 493

Sensitive spray reagent for guanine nucleotides (208) 164

Application of simultaneous UV-radioactivity HPLC to the study of intermediary metabolism. I. Purine nucleotides, nucleosides and bases (209) 283

HPLC of nucleobases, nucleosides and nucleotides. I. Mobile phase composition for the separation of charged solutes by reversed-phase chromatography (210) 229

HPLC of nucleobases, nucleosides and nucleotides. II. Mobile phase composition for the separation of charged solutes by ion-exchange chromatography (210) 241

Numerical spectroscopy
Numerical spectroscopy: absorbance index technique and algorithm for qualitative analysis in LC (204) 149

Nutmeg oil
Analysis of nutmeg oil using chromatographic methods (204) 391

O

Octadecane
Mixed retention mechanisms in GLC. III. Determination of the gas-liquid adsorption coefficient for diisopropyl ether on *n*-octadecane (206) 1

Octane
Determination of activity coefficients at very low concentrations by the inert gas stripping method (207) 193

Octopamine
Chromatographic separation of some biogenic amines on a weakly acidic ion-exchange resin (207) 286

Octriptyline
Identification of carbamate derivatives formed during chloroform extraction of tricyclic antidepressants from urine (209) 463

Oestrogens
Separation of some estrogens by TLC (205) 223

Oil
Application of GC on glass capillary columns to the analysis of hydrocarbon pollutants from the Amoco Cadiz oil spill (203) 279

Oils
Determination of the total sulphur content in gas oils with a flame photometric detector (204) 153

Correlation of crude oils and source rocks in the German Molasse basin. Applicability of chromatographic techniques (204) 481

Oleic acid
Degradation of triglycerides in GC capillaries: studies by reversing the column (205) 289

Oligonucleotides
Exclusion column for HPLC of oligonucleotides (206) 493

On-line multi-dimensional HPLC
Automated on-line multi-dimensional HPLC techniques for the clean-up and analysis of water-soluble samples (206) 43

On-line sample preparation
Application of column switching in HPLC to on-line sample preparation for complex separations (204) 65

Opiates
Determination of opiates in biological samples by glass capillary GC with electron-capture detection (206) 109

Opioid peptides
Development of a combined HPLC-fluorometric quantitative assay for enkephalins (202) 500

Optimization
Search for optimal eluent composition for isocratic LCC (201) 241

Pulsed injections of ion interaction reagent applied to the liquid chromatographic separation of 2,6-disubstituted anilines (202) 233

Optimisation of reversed-phase HPLC separations with the aid of a programmable calculator (202) 469

Selection of optimal conditions in preparative LC. I. Theory (203) 41

Optimization of the instrumental parameters of a combined liquid chromatograph-mass spectrometer, coupled by an interface for direct liquid introduction. II. Nebulization of liquids by diaphragms (203) 117

Increased speed of analysis in directly coupled GC-MS systems. Capillary columns at sub-atmospheric outlet pressures (203) 207

Affinity constants in immunoadsorptive chromatography: their simple determination and application to the selection of eluents in and optimization of the elution process (205) 31

Simple method for the optimisation of mobile phase composition for HPLC analysis of a multi-component mixture (208) 391

Optimization in TLC. Some practical considerations (209) 129

Dynamic cation-exchange systems for rapid separations of nucleobases and nucleosides by HPLC (209) 369

Design and applications of a microprocessor-controlled system to optimize preparative LC (210) 33

Separation of carbohydrates and polyols by a radially compressed HPLC silica column modified with tetraethylenepentamine (210) 45

HPLC of nucleobases, nucleosides and nucleotides. I. Mobile phase composition for the separation of charged solutes by reversed-phase chromatography (210) 229

HPLC of nucleobases, nucleosides and nucleotides. II. Mobile phase composition for the separation of charged solutes by ion-exchange chromatography (210) 241

Organic acids
Reversed-phase LLC of organic acids with a complexing stationary phase containing tri-*n*-octylphosphine oxide (204) 43

Organic compounds
High-voltage paper electrophoresis of organic compounds in acetonitrile (207) 353

Evaluation of the suitability of selected porous polymers for preconcentration of volatile organic compounds (208) 239

Identification of residual organic compounds in food packages (210) 93

Organic impurities
Trace impurities in solvents commonly used for GC analysis of environmental samples (206) 279

Organic modifiers
Solute-solvent interactions in ion-pair LC of amines on non-polar bonded phases using 1-pentanol and N,N-dimethyloctylamine as organic modifiers (203) 93

Column LC on dynamically modified silica. I (209) 203

Simple relationships concerning mobile and stationary phases in normal- and reversed-phase chromatography (210) 211

Organic pollutants
Some critical parameters in collection, recovery and GC analysis of organic pollutants in ambient air using light adsorbents (203) 263

Organosulphur compounds
LC detector for organosulphur compounds based on a ligand-exchange reaction (203) 165

Organotin compounds
Rapid method for the determination of tetra-alkyltin compounds in various kinds of biological material by GC (207) 237

Determination of butyltin species in water by GC with flame photometric detection (209) 458

Ornithine decarboxylase
Fluorimetric assay for ornithine decarboxylase by HPLC (202) 107

Orthophosphate
Flow injection system as a post-column reaction detector for HPLC of phosphinate, phosphonate and orthophosphate (206) 501

Osmotic phenomena
The possibility of using osmotic phenomena in an eluent pump for column LC (202) 279

Oxalate
Effect of hydrogen bonding on the selectivity of anion-exchange equilibria (201) 85

Oxalic acid
Rapid determination of oxalic acid by reversed-phase HPLC (210) 540

Oxaprotiline
Quantitative HPLC assay for the determination of maprotiline and oxaprotiline in human plasma (204) 349

Oxonol dyes
Exclusion chromatography of anionic dyes. Anomalous elution peaks due to reversible aggregation (209) 405

Oxygen
Determination of traces of nitrogen and argon in oxygen by a simple GC method (209) 455

Oxygen doping
Oxygen doping of carrier gas in the determination of dichloromethane in liquid foodstuffs by headspace GC with electron-capture detection (206) 589

Oxygen sorption
Application of GC for investigating slow sorption processes (205) 425

P

Packings
Novel porous carbon packings in reversed-phase HPLC (202) 3

Dissolution of silaceous chromatographic packings in various aqueous eluents (206) 27

Graphitized carbon black columns for HPLC (206) 35

Suitability of TSK-gel Toyopearl packing for the gel permeation chromatographic analysis of dextran (208) 74

HPLC on dynamically modified silica. II. Modification of various silica packings with cetyltrimethylammonium bromide (210) 453

Packing techniques
Packing of Toyopearl column for gel filtration. I. Influence of packing velocity on column performance (205) 185

Packing of Toyopearl columns for gel filtration. II. Dependence of optimal packing velocity on column size (206) 135

Packing of Toyopearl columns for gel filtration. III. Semi-constant-pressure packing (208) 71

Packing of 3-μm particle ODS silicas using hexanol-1-methylene chloride (1:1) as a slurry medium in HPLC (210) 512

Pairing ions
Mechanism of retention of acidic solutes by octadecyl silica using quaternary ammonium pairing ions as ion exchangers (202) 333

Mechanism of ion-pair LC of amines, neutrals, zwitterions and acids using anionic hetaerons (204) 3

Ion-exchange-desolvation mechanism on octadecyl silica using anionic hydrophobic pairing ions (209) 175

Ion-exchange phenomena and concomitant pH shifts on the equilibration of reversed-phase packings with ion-pairing reagents (209) 393

Paracetamol
Rapid micro-method for the measurement of paracetamol in blood plasma or serum using GLC with flame-ionisation detection (209) 67

Paraffinic stationary phases
Selectivity of paraffinic stationary phases for GLC (209) 21

Parallel flow dialysis technique
Improvement of the parallel flow dialysis technique for the detection of drug-binding proteins in column effluents (210) 461

Paraquat
Off-line combination of isotachophoresis and MS (209) 306

Particle separation
Capillary hydrodynamic chromatography: An investigation into operational characteristics (208) 175

Particle size
Column loadability and particle size in preparative LC (209) 432

Partition coefficients
Reversed-phase LC. II. Determination of partition coefficients of barbiturates and urea herbicides (209) 7

Pavine
Simultaneous monitoring of light-absorption and optical activity in the LC of chiral substances (202) 239

PCBs
Determination of individual chlorinated biphenyls in agricultural products by automated capillary GC. Determination in cattle feed and its relation to milk residues (204) 413

Quantitative characterization of polychlorinated biphenyl mixtures (Aroclors 1248, 1254

and 1260) by GC using capillary columns (205) 103

Determination of polychlorinated biphenyl vapor pressures by capillary GC (210) 331

Peak broadening
Peak width in solvent-programmed chromatography. I. General description of peak broadening in solvent-programmed elution (204) 77

Peak moments
Peak moments for GC columns with a pressure drop (207) 181

Peak shape
Detection of small variations in shape between two chromatographic peaks (204) 163

Pectic enzymes
HPLC of pectic enzymes (207) 99

Pemoline
Reversed-phase HPLC detection of pemoline in doping control (202) 131

Penicillins
High-speed gel filtration chromatography of polymers formed by β-lactam antibiotics (207) 425

Pentane
Determination of activity coefficients at very low concentrations by the inert gas stripping method (207) 193

Pentanol
Solute-solvent interactions in ion-pair LC of amines on non-polar bonded phases using 1-pentanol and N,N-dimethyloctylamine as organic modifiers (203) 93

Pentoses
Gas chromatographic determination of 6-deoxyhexoses, pentoses and hexoses of cardiac glycosides. I. GLC on packed columns (in German) (210) 291

GC determination of 6-deoxyhexoses, pentoses and hexoses of cardiac glycosides. II. GLC on glass capillary columns (in German) (210) 337

Peptides
Evaluation of triethylammonium phosphate and formate-acetonitrile mixtures as eluents for high-performance gel permeation chromatography (202) 211

GC separation of enantiomers of some dipeptides on an optically active stationary phase (202) 302

Development of a combined HPLC-fluorometric quantitative assay for enkephalins (202) 500

Surface silanols in silica-bonded hydrocarbonaceous stationary phases. II. Irregular retention behavior and effect of silanol masking (203) 65

HPLC of amino acids, peptides and proteins. XXVII. Solvophobic considerations for the separation of unprotected peptides on chemically bonded hydrocarbonaceous stationary phases (203) 349

Separation of the diastereoisomers of pyroglutamylhistidyl-3,3-dimethylprolineamide by ligand-exchange chromatography (204) 195

Analytical and preparative mapping of complex peptide mixtures by reversed-phase HPLC (205) 65

Analysis of contaminants in commercial preparations of the tetrapeptide tuftsin by HPLC (205) 179

The use of reversed-phase HPLC with radial compression for the analysis of peptide and protein mixtures (206) 59

Use of mixed-mode HPLC for the separation of peptide and protein mixtures (206) 71

Shortened purification procedure of a spleen-derived immunosuppressive peptide (206) 177

Reversed-phase supports for the resolution of large denatured protein fragments (207) 325

Reversed-phase and soap TLC of dipeptides (207) 412

In situ silylation of an octadecylsilyl-silica stationary phase applied to the analysis of peptides, such as secretin and glucagon (207) 421

Effect of salt concentration on the elution properties of complexes formed between sodium dodecylsulphate and protein polypeptides in high-performance silica gel chromatography (208) 201

Evidence for carrier ampholyte-peptide interactions during somatomedin purification (209) 273

TLC of amino acids and dipeptides on RP-2, RP-8 and RP-18 plates impregnated with dodecylbenzenesulphonic acid (209) 312

Affinity technique for the isolation of polypeptides containing arginine modified with cyclohexane-1,2-dione, and their analysis by combined GLC-MS (210) 301

Pesticides
Determination of triazine herbicides in various crops by capillary GC with thermionic detection (202) 431

HPLC determination of the behaviour of metribuzin during some water treatment processes (in German) (204) 461

Identification of chlorinated phenols as degradation products of chlorinated pesticides in biological materials (205) 194

Separation of multi-component mixtures of N-dealkylated degradation products of *s*-triazine

herbicides and their parent compounds by glass capillary GLC (205) 464

Determination of hydrophobic parameters for pyridazinone herbicides by liquid-liquid partition and reversed-phase HPLC (206) 7

Reversed-phase HPLC determination of ethylenethiourea in ethylenebisdithiocarbamate formulations (in French) (206) 125

HPLC analysis of technical Ruelene insecticide (206) 181

Characterization of interferences in the analysis of serum for DDT and its metabolites (206) 617

Determination and confirmation of binapacryl and dinobuton residues on apples and cucumbers by HPLC (208) 137

Evaluation of capillary GC for thermolabile phenylurea herbicides. Comparison of different columns including fused silica (208) 217

Determination of some carbamate pesticides by HPLC with electrochemical detection (208) 295

Gas chromatographic determination of carbaryl residues on stored wheat by on-column transmethylation (208) 305

Reversed-phase ion-pair HPLC of nitrophenols (208) 331

Determination of triadimefon in grape juice and wine using capillary GC (208) 409

Reversed-phase LC. II. Determination of partition coefficients of barbiturates and urea herbicides (209) 7

Identification of dieldrin derivatives (209) 101

Off-line combination of isotachophoresis and MS (209) 306

TLC of phenoxyacetic acid herbicides (209) 329

GLC of selected benzimidazole fungicides by flash-heater methylation with trimethylanilinium hydroxide (210) 83

Reversed-phase HPLC separation of carbofuran and its five metabolites (210) 356

Pesticide spray drift
Sample collection and field analysis of tris-(2-ethylhexyl) phosphate used in a study of pesticide spray drift (204) 453

Petroleum products
Rapid separation of heavy petroleum products by HPLC (206) 289

Petroleum residues
Characterisation of "deasphaltened" petroleum residues by gel permeation chromatography (203) 313

pH effects
Study of factors which influence the TLC behaviour of compounds. III. TLC of fluorescein on pH-gradient layers (in German) (205) 457

pH method
pH method for the interpretation of HPLC behaviour with non-aqueous polar mobile phases (209) 149

pH shifts
Ion-exchange phenomena and concomitant pH shifts on the equilibration of reversed-phase packings with ion-pairing reagents (209) 393

Phase-fluctuation optical heterodyne spectrometer
Phase-fluctuation optical heterodyne spectrometer as a non-destructive detector for GC (206) 205

Phencyclidine
Investigation of the GLC separation of phencyclidine and some heterocyclic analogues by combined GLC-MS (202) 309

Phenobarbital
Acid-washed graphitized carbon black and its application in the separation of some acids (204) 255

Phenolic compounds
TLC of chlorinated guaiacols (207) 154

Determination of phenolic compounds in alternate fuel matrices (207) 256

Rapid method of analyzing phenolic compounds in *Pinus elliotti* using HPLC (208) 132

Proanthocyanidins of barley: separation and identification (208) 419

Study of PC and TLC of phenolic substances by statistical methods (209) 377

TLC of chlorinated catechols on a silica gel 60 layer (209) 446

Phenolic plastic additives
Determination of phenolic plastic additives in edible oils by TLC (204) 385

Phenols
Effect of complex formation in the separation of some phenols by ion-exchange chromatography (201) 293

GC determination of phenols as 2,4-dinitrophenyl ethers using glass capillary columns and an electron-capture detector (202) 413

Identification of chlorinated phenols as degradation products of chlorinated pesticides in biological materials (205) 194

Direct coupling of a micro high-performance liquid chromatograph and a mass spectrometer (206) 245

Phenolic constituents in pulp mill process streams (208) 287

Phenoxazones
Separation of 2-amino-3*H*-phenoxazin-3-one impurity from *o*-aminophenol (209) 113

Phenoxyacetic acids
TLC of phenoxyacetic acid herbicides (209) 329

Phenylbicyclo[2.2.2]octanes
Derivatisation and GLC of 3-aminomethyl-2-phenylbicyclo[2.2.2]octanes (206) 83

Phenylboronic acids
Applications of immobilised phenylboronic acids as supports for group-specific ligands in the affinity chromatography of enzymes (210) 267

Phenylbutazone
Retention data methods for the determination of drug-protein binding parameters by HPLC (204) 285

Phenyl isocyanate
Trace analysis of isocyanates in industrial atmospheres using GC and electron-capture detection (208) 313

Phenylureas
Evaluation of capillary GC for thermolabile phenylurea herbicides. Comparison of different columns including fused silica (208) 217

Pheromone components
LC determination of submicrogram amounts of ipsenol and ipsdienol, pheromone components of *Ips paraconfusus* Lanier (202) 148

Phorbol
Isolation of phorbol and 4*α*-phorbol from croton oil by droplet counter-current chromatography (206) 421

Phosphatidylcholines
General method for the analysis of phosphatidylcholines by HPLC (208) 398

Phosphatidylethanolamine
Measurement of ethanolamine- and serine-containing phospholipids by HPLC with fluorescence detection of their Dns derivatives (208) 339

Phosphinate
Flow injection system as a post-column reaction detector for HPLC of phosphinate, phosphonate and orthophosphate (206) 501

Phosphine
Method of trapping low levels of phosphine at ambient temperature for GC analysis (206) 384

Phosphoamino acids
HPLC of acid-stable and acid-labile phosphoamino acids (202) 263

Phospholipase C
Enzymatic reactions on TLC plates. III. Phospholipase C hydrolysis of phosphatidylcholine and separation of the products on a single plate; an assay method for the enzyme (210) 544

Phospholipid precursors
HPLC separation of phospholipid precursors and their direct measurement by automatic phosphorus analysis (206) 327

Phospholipids
HPLC analysis of egg yolk phospholipids (205) 393

Separation of phospholipids on chromarods (205) 490

TLC of phospholipids. Separation of major phospholipid classes of milk without previous isolation from total lipid extracts (206) 200

Sensitive GC determination of certain glycerophosphates by use of the flame photometric detector. Application to glycerophospholipids (206) 387

Measurement of ethanolamine- and serine-containing phospholipids by HPLC with fluorescence detection of their Dns derivatives (208) 339

Phosphonate
Flow injection system as a post-column reaction detector for HPLC of phosphinate, phosphonate and orthophosphate (206) 501

Phosphorus
Determination of phosphorus in simple steels using ion-exchange chromatography (201) 305

Phosphorus oxoanions
Donnan exclusion chromatography. I. Theory and application to the separation of phosphorus oxoanions or metal cations (201) 259

Photochemical reaction detector
Solvent segmentation in LC: application to photochemical reaction detectors (205) 229

Photoionization detector
Quenching or enhancement of the response of the photoionization detector (205) 413

Phthalates
Component loss during evaporation-reconstitution of organic environmental samples for GC analysis (207) 203

Phylloquinone
Resolution of menaquinones (vitamin K_2) by HPLC (206) 333

Phytuberin
HPLC determination of stress-induced sesquiterpenes of the potato (*Solanum tuberosum*) (210) 365

Plant hormones
Identification of 3-indoleacetic acid in *Pinus sylvestris* L. by GC-MS, and quantitative analysis by ion-pair reversed-phase LC with spectrofluorimetric detection (205) 125

Rapid method for the determination of abscisic acid applied to apple leaves (205) 199

Analysis of plant hormones using HPLC (208) 124

Microscale preparation of pentafluorobenzyl esters. Electron-capture GC detection of indole-3-acetic acid from plants (209) 413

Reversed-phase ion-pair HPLC of the plant hormones indolyl-3-acetic and abscisic acid (209) 489

Plastic additives
Determination of phenolic plastic additives in edible oils by TLC (204) 385

Platelets
Surface affinity chromatographic separation of blood cells. II. Influence of mobile phase composition on the chromatographic behaviour of human peripheral blood cells on polyethylene glycol-bonded Sepharose (206) 17

Plate number
Evaluation of capillary columns by separation number or plate number (207) 291

Plate numbers
Boxcar chromatography. A new approach to increased analysis rate and very large column plate numbers (203) 3

Pluronic F68
Use of Pluronic F68 glass capillary columns for the analysis of essential oil samples (204) 59

Polar compounds
HPLC of polar compounds on buffered silica gel (202) 397

Polarographic detection
Reversed-phase HPLC with differential pulse polarographic detection for assaying drugs in feed. Stability-indicating assay of diacetolol (202) 405

Polarographic detector
Alternating voltage polarographic detection for HPLC and its evaluation for the analysis of bile acids (204) 131

Pollutants
Some critical parameters in collection, recovery and GC analysis of organic pollutants in ambient air using light adsorbents (203) 263

Application of GC on glass capillary columns to the analysis of hydrocarbon pollutants from the Amoco Cadiz oil spill (203) 279

Determination of individual chlorinated biphenyls in agricultural products by automated capillary GC. Determination in cattle feed and its relation to milk residues (204) 413

GC investigation of raw wastewater from coal gasification (204) 439

Calibration method for the GC analysis of halocarbons in atmospheric samples using permeation tubes and an electron-capture detector (204) 445

Evaluation of bonded phases for the HPLC determination of polycyclic aromatic hydrocarbons in effluent waters (204) 469

Controlled environment portable gas chromatograph for *in situ* aircraft or balloon-borne applications (205) 271

GC analysis of aromatic amines as N-permethylated derivatives (206) 555

Rapid method for the determination of polycyclic aromatic hydrocarbons in environmental samples by LC and GC (206) 611

Component loss during evaporation-reconstitution of organic environmental samples for GC analysis (207) 203

Application of headspace GC to the determination of chlorinated hydrocarbons in waste waters (207) 373

Impurities arising from the use of XAD-2 resin for the extraction of organic pollutants in drinking water (208) 89

Trace analysis of isocyanates in industrial atmospheres using GC and electron-capture detection (208) 313

Determination of 2,3,7,8-tetrachlorodibenzo-*p*-dioxin in goat milk and tissues by glass capillary GC and medium resolution mass fragmentography (208) 323

Determination of polychlorinated biphenyl vapor pressures by capillary GC (210) 331

Polyacrylamide gels
Thermally stabilized very thin (0.02-0.3 mm) polyacrylamide gels for electrophoresis (202) 45

Polyamines
Simple method for the simultaneous determination of histamine, polyamines and histone H1 (205) 155

Quantitative analysis of free amine in polyaminoamide and polyamine hardeners by means of gel permeation chromatography (in German) (206) 343

Polyaminoamides
Quantitative analysis of free amine in polyaminoamide and polyamine hardeners by means of gel permeation chromatography (in German) (206) 343

Poly(A)-mRNA
Use of biospecific adsorbents with polysaccharide spacers in affinity chromatography (210) 67

Polychlorinated biphenyls
see PCBs

Polycyclic aromatic hydrocarbons
see also polynuclear aromatic hydrocarbons

Quantitative trace analysis of polycyclic aromatic hydrocarbons by HPLC and low-temperature fluorimetry in Shpolskii matrices at 4.2°K. Application to medicinal white oils (204) 135

Evaluation of bonded phases for the HPLC determination of polycyclic aromatic hydrocarbons in effluent waters (204) 469

Direct coupling of a micro high-performance liquid chromatograph and a mass spectrometer (206) 245

Rapid method for the determination of polycyclic aromatic hydrocarbons in environmental samples by LC and GC (206) 611

Feasibility study of high-temperature liquid crystals in wall-coated open-tubular columns (209) 87

Polydispersity
High-performance gel permeation chromatography with silica microspheres: mass-transfer dispersion and polydispersity of polystyrene (206) 215

Polyenic antibiotics
Purification of a polyenic antibiotic by preparative LC (208) 365

Poly(ethylene glycols)
Determination of poly(ethylene glycols) in non-ionic surfactants by preparative HPLC (205) 473

Polymeric systems
Use of solute partition for comparative characterization of several aqueous biphasic polymeric systems (202) 63

Polymers
GC determination of water: a source of systematic error introduced by interactions of polar compounds on porous polymer GC columns (203) 271

Determination of molecular-weight distribution of polymers by microcolumn exclusion chromatography (207) 145

Evaluation of the suitability of selected porous polymers for preconcentration of volatile organic compounds (208) 239

Modified method of universal calibration for the determination of molecular weight and molecular-weight distribution (208) 253

Gradient adsorption TLC of styrene-acrylonitrile random copolymers (208) 381

Reactive polymers. XL. Study of the internal structure of thermally treated polymeric sorbents based on glycidyl methacrylate copolymers (210) 255

Calculation of hydrodynamic parameters of random coil polymers from size exclusion chromatography and comparison with parameters by conventional methods (210) 433

Polymer sorbents
Physico-chemical and chromatographic properties of pyrazole-containing polymer sorbents (206) 233

Polymyxin antibiotics
Analytical and preparative methods for polymyxin antibiotics using HPLC with a porous styrene-divinylbenzene copolymer packing (206) 563

Polymyxin B sulphate
HPLC of polymyxin B sulfate and colistin sulfate (208) 118

Polynuclear aromatic hydrocarbons
see also polycyclic aromatic hydrocarbons

Inadvertent formation of polynuclear aromatic hydrocarbons by the flame sealing of glass ampules (202) 294

Application of GC on glass capillary columns to the analysis of hydrocarbon pollutants from the Amoco Cadiz oil spill (203) 279

Studies of the application of selective chromatographic and spectrofluorimetric techniques in the separation, characterization, and analysis of polycyclic aromatic hydrocarbons (203) 293

GC investigation of raw wastewater from coal gasification (204) 439

Component loss during evaporation-reconstitution of organic environmental samples for GC analysis (207) 203

1,5-Bis-(*m*-phenoxyphenyl)-1,1,3,3,5,5-hexaphenyltrisiloxane as a stationary phase in high-temperature GC (207) 345

Evaluation of bonded methylsilicone rubber as a stationary phase for glass capillary columns (208) 231

Polyols
Separation of carbohydrates and polyols by a radially compressed HPLC silica column modified with tetraethylenepentamine (210) 45

Polypeptides
Effect of salt concentration on the elution properties of complexes formed between sodium dodecylsulphate and protein polypeptides in high-performance silica gel chromatography (208) 201

Affinity technique for the isolation of polypeptides containing arginine modified with cyclohexane-1,2-dione, and their analysis by combined GLC-MS (210) 301

Polyphenols
HPLC assay for theaflavins (206) 400

Proanthocyanidins of barley: separation and identification (208) 419

Poly(phenyl ethers)
1,5-Bis-(*m*-phenoxyphenyl)-1,1,3,3,5,5-hexaphenyltrisiloxane as a stationary phase in high-temperature GC (207) 345

Polysaccharides
High-performance size-exclusion chromatography of guar gum (206) 410

GLC analysis of partially methylated alditol acetates on a glass capillary column (208) 96

High-performance size exclusion chromatography of sea worm chlorocruorin and other large proteins, viruses and polysaccharides on a TSK G5000 PW preparative column (210) 443

GLC and MS of methyl ethers of methyl N-acetyl-N-methyl-β-D-neuraminate methyl glycoside (210) 487

Polysaccharide spacers
Affinity adsorbents with polysaccharide spacers. Preparation and properties (210) 55

Use of biospecific adsorbents with polysaccharide spacers in affinity chromatography (210) 67

Polystyrene
High-performance gel permeation chromatography with silica microspheres: mass-transfer dispersion and polydispersity of polystyrene (206) 215

Polystyrene-divinylbenzene
Thermal studies on the dehydration of polystyrene-divinylbenzene-type ion exchangers (205) 263

Porapak
Evaluation of the suitability of selected porous polymers for preconcentration of volatile organic compounds (208) 239

Pore size distribution
Pore size distribution analysis of gel substances by size exclusion chromatography (206) 449

Porous glass
Separation of proteins on silicone-coated porous glass (207) 276

Potentiometric detector
Potentiometric detector with a glass electrode for the ion-exchange chromatography of carboxylic acids (202) 37

Application of a copper tubular electrode as a potentiometric detector in the determination of amino acids by HPLC (209) 29

Potentiometric membrane cell
A potentiometric membrane cell as a detector in LC (203) 153

Preparative installations
Design of and experience in operating technological preparative installations (204) 167

Proanthocyanidins
Proanthocyanidins of barley: separation and identification (208) 419

Profiles, colour
Identification of basic drugs by the TLC profiles of their ninhydrin complexes (206) 267

Programmable calculator
Optimisation of reversed-phase HPLC separations with the aid of a programmable calculator (202) 469

Propionic acid
Quantitative GC determination of low-molecular-weight straight-chain carboxylic acids as their *p*-bromophenacyl esters after extractive alkylation in acidic medium (206) 89

Propionyl-CoA carboxylase
Chromatography of kidney propionyl-CoA and 3-methylcrotonyl-CoA carboxylases on Cibacron Blue- and Procion Red-substituted agaroses (205) 213

Propranolol
Separation of enantiomeric amines by ion-pair chromatography (204) 179

Propylene halohydrins
GC methods for the analysis of the halohydrins of ethylene and propylene (205) 165

Prostaglandins
Separation of prostaglandins A, B, D, E, F, thromboxane and 6-keto prostaglandin $F_{1\alpha}$ by TLC (209) 334

Proteins
see also enzymes

Thermally stabilized very thin (0.02-0.3 mm) polyacrylamide gels for electrophoresis (202) 45

Use of solute partition for comparative characterization of several aqueous biphasic polymeric systems (202) 63

Estradiol affinity chromatography. Application to purification of murine alpha-fetoprotein (202) 113

Evaluation of triethylammonium phosphate and formate-acetonitrile mixtures as eluents for high-performance gel permeation chromatography (202) 211

Analytical and preparative mapping of complex peptide mixtures by reversed-phase HPLC (205) 65

The use of reversed-phase HPLC with radial compression for the analysis of peptide and protein mixtures (206) 59

Use of mixed-mode HPLC for the separation of peptide and protein mixtures (206) 71

Altered synthesis of carboxylacrylamide which offers improved resolution of venom proteins (206) 368

Chromatofocusing. III. The properties of a DEAE-agarose anion exchanger and its suitability for protein separations (206) 429

Chromatofocusing. IV. Properties of an agarose polyethyleneimine ion exchanger and its suitability for protein separations (206) 441

Characteristics of immobilized tannin for protein adsorption (207) 13

Separation of proteins on silicone-coated porous glass (207) 276

Reversed-phase supports for the resolution of large denatured protein fragments (207) 325

Further observations on the chromatography of myosin preparations on hydroxyapatite (207) 395

Effect of salt concentration on the elution properties of complexes formed between sodium dodecylsulphate and protein polypeptides in high-performance silica gel chromatography (208) 201

Improved method of separating and quantitating hemoglobin compositions by isoelectric focusing (209) 451

Design and applications of a microprocessor-controlled system to optimize preparative LC (210) 33

Use of biospecific adsorbents with polysaccharide spacers in affinity chromatography (210) 67

Separation of bovine caseins using hydrophobic interaction chromatography (210) 105

Partial purification of microsomal proteolipid(s) from *Neurospora crassa* by HPLC on silica gel (210) 174

Calculation of hydrodynamic parameters of random coil polymers from size exclusion chromatography and comparison with parameters by conventional methods (210) 433

High-performance size exclusion chromatography of sea worm chlorocruorin and other large proteins, viruses and polysaccharides on a TSK G5000 PW preparative column (210) 443

Improvement of the parallel flow dialysis technique for the detection of drug-binding proteins in column effluents (210) 461

Proteolipids
Partial purification of microsomal proteolipid(s) from *Neurospora crassa* by HPLC on silica gel (210) 174

Protonation constants
Equation for the evaluation of the protonation constants of complex-forming resins (201) 59

Protonation equilibria
Modelling of chelating resin protonation equilibria (201) 67

Psilocin
Quantitative analysis of psilocybin and psilocin in *Psilocybe baeocystis* (Singer and Smith) by HPLC and by TLC (207) 379

Psilocybin
Quantitative analysis of psilocybin and psilocin in *Psilocybe baeocystis* (Singer and Smith) by HPLC and by TLC (207) 379

Determination of psilocybin in *Psilocybe semilanceata* using HPLC on a silica column (210) 163

Psycho-stimulant drugs
Reversed-phase HPLC detection of pemoline in doping control (202) 131

Pump design
The possibility of using osmotic phenomena in an eluent pump for column LC (202) 279

Purine bases
Separation of 5-alkyluracils and purine bases in hydrolysates of enzymatically synthesized nucleic acids by ion-pair HPLC (204) 213

Purine nucleotides
Application of simultaneous UV-radioactivity HPLC to the study of intermediary metabolism. I. Purine nucleotides, nucleosides and bases (209) 283

Putrescine
Fluorimetric assay for ornithine decarboxylase by HPLC (202) 107

Simple method for the simultaneous determination of histamine, polyamines and histone H1 (205) 155

Pyrazole-containing polymer sorbents
Physico-chemical and chromatographic properties of pyrazole-containing polymer sorbents (206) 233

Pyrazolone oxonols
Exclusion chromatography of anionic dyes. Anomalous elution peaks due to reversible aggregation (209) 405

Pyrethrins
Use of circular dichroism as a HPLC detector (204) 103

Pyridazinones
Determination of hydrophobic parameters for pyridazinone herbicides by liquid-liquid partition and reversed-phase HPLC (206) 7

Pyridine bases
Analysis of pyridine bases isolated from a high-temperature coal tar by capillary GC (209) 472

Pyridine derivatives
Persulphate ion as a reagent for the detection of aromatic compounds containing the NH_2 group using TLC (208) 167

Pyridines
Use of cation-exchange resin for the detection of alkylpyridines in beer (202) 271

Pyrido-pyrimidine derivatives
Assessment of quantitative relationships between Kováts' retention index and chemical structure: prediction for pyrido-pyrimidine derivatives (202) 122

Pyridoxine
Separation of vitamin B_6 by reversed-phase ion-pair HPLC (202) 134

Pyrithiones
TLC of pyrithiones (206) 301

Pyroglutamylhistidyldimethylproline–amide
Separation of the diastereoisomers of pyroglutamylhistidyl-3,3-dimethylprolineamide by ligand-exchange chromatography (204) 195

Pyrrolizidine alkaloids
Ion-pair adsorption chromatography of pyrrolizidine alkaloids (205) 218

HPLC analysis of pyrrolizidine (*Senecio*) alkaloids using a reversed-phase styrene-divinylbenzene resin column (210) 154

Q

Quantitative techniques
Quantitative techniques in TLC (209) 125

Quaternary ammonium compounds
Gel chromatographic behaviour of tetraalkylammonium ions on Sephadex G-10 (210) 1

Estimation of quaternary ammonium and tertiary sulphonium compounds by thin-layer electrophoresis and scanning reflectance densitometry (210) 550

Quaternary ammonium pairing ions
Mechanism of retention of acidic solutes by octadecyl silica using quaternary ammonium pairing ions as ion exchangers (202) 333

Quinine
Preadsorbent TLC. III. Direct detection of quinine in urine as a presumptive test for heroin (206) 196

Quinolines
Fluorescence detection of 8-hydroxyquinoline and some of its halogenated derivatives using post-column derivatization in HPLC (210) 536

Quinones
GLC separation of methoxy-substituted quinones on nematic liquid crystals (202) 75

R

Radial compression
The use of reversed-phase HPLC with radial compression for the analysis of peptide and protein mixtures (206) 59

Radiation damage
Examination of radiation damage to ion exchangers by diffuse reflectance spectroscopy (201) 121

Reaction loops
Glass capillary reaction loops for detection of alcohols, aldehydes and ketones by subtraction (205) 39

Regeneration curves
Estimation of ion-exchange process limits by selectivity calculations. II. Regeneration curves (201) 35

Relative response
Response and linearity of different lipid compounds when analyzed by TLC with flame ionization detection (205) 339

Relaxation time
Measurement of the relaxation time of water protons in ion exchanger-water systems (201) 79

Residual solvents
Quantitative analysis of residual solvents in food packaging printed films by capillary GC with multiple headspace extraction (204) 371

Resin poisons
Determination of the tetrathionate content of an anion-exchange resin (201) 313

Resins
Influence of cations and anions on the separation properties of macroporous polystyrene-type resins for cephalosporins (201) 287

Thermal studies on the dehydration of polystyrene-divinylbenzene-type ion exchangers (205) 263

Application of macroporous anion-exchange resins AN-221 and AN-211 as sorbents for GC (206) 239

Altered synthesis of carboxylacrylamide which offers improved resolution of venom proteins (206) 368

Resolution of tritium-labelled amino acid racemates by ligand-exchange chromatography. II. L-Hydroxyproline- and L-phenylalanine-modified resins for the resolution of common α-amino acids (207) 231

Separation of aromatic amino acids on β-cyclodextrin polyurethane resins (208) 35

Impurities arising from the use of XAD-2 resin for the extraction of organic pollutants in drinking water (208) 89

Optimal conditions for the coupling of aromatic amines to epoxy-activated Sepharose 6B (209) 363

Resolving power
Limiting factors for the resolving power of isoelectric focusing in natural pH gradients (205) 355

Retention behaviour
Semiempirical prediction of retention of some ampholytes on a carbon adsorbent (207) 79

pH method for the interpretation of HPLC behaviour with non-aqueous polar mobile phases (209) 149

Retention data
Analytical aspects of barbiturate abuse. Identification of drugs by the effective combination of GLC, HPLC and TLC techniques (204) 275

Retention index system
Mathematical aspects of the Rohrschneider concept (in German) (202) 179

Retention indices
Effect of adsorption on the reproducibility of retention indices of hydrocarbons in capillary GLC (209) 15

Retention mechanism
Mechanistic study on ion-pair reversed-phase chromatography (201) 211

Mechanism of retention of acidic solutes by octadecyl silica using quaternary ammonium pairing ions as ion exchangers (202) 333

Surface silanols in silica-bonded hydrocarbonaceous stationary phases. I. Dual retention mechanism in reversed-phase chromatography (203) 53

Surface silanols in silica-bonded hydrocarbonaceous stationary phases. II. Irregular retention behavior and effect of silanol masking (203) 65

Mechanism of ion-pair LC of amines, neutrals, zwitterions and acids using anionic hetaerons (204) 3

Mixed retention mechanisms in GLC. III. Determination of the gas-liquid adsorption coefficient for diisopropyl ether on *n*-octadecane (206) 1

Mixed retention mechanisms in GLC. IV. Comparisons of silanized and Carbowax-modified supports (207) 69

Mechanism of separation of aliphatic alcohols in aqueous dextran gel systems (208) 183

Ion-exchange-desolvation mechanism on octadecyl silica using anionic hydrophobic pairing ions (209) 175

Retention parameters
Retention parameters and eluent composition in TLC and HPLC of aromatic nitro compounds in reversed-phase systems (205) 451

Retinol
Separation and determination of the *cis-trans* isomers of the vitamin A esters by HPLC (in German) (206) 319

R_F values
The R_F value as a constant in TLC (202) 15

Rhubarb petioles
Rapid determination of oxalic acid by reversed-phase HPLC (210) 540

Ribitol teichoic acid
Abnormal affinity of *Staphylococcus aureus* N-acetyl glucosamine ribitol teichoic acid for wheat-germ agglutinin (209) 323

Ribonucleic acids
see RNA

Ribonucleosides
Separation of modified bases and ribonucleosides with cytokinin activity using fused silica capillary GC (209) 467

Rishitin
HPLC determination of stress-induced sesquiterpenes of the potato (*Solanum tuberosum*) (210) 365

R_M values
Reversed-phase TLC of steroids. I. Measurement and interpretation of R_M values (in German) (205) 113

Rohrschneider concept
Mathematical aspects of the Rohrschneider concept (in German) (202) 179

Rotating coil assembly
Preparative counter-current chromatography with a rotating coil assembly (207) 171

Rotenoids
Use of circular dichroism as a HPLC detector (204) 103

Ruelene insecticide
HPLC analysis of technical Ruelene insecticide (206) 181

S

Saccharides
see also sugars and carbohydrates

Salmefamol
Quantitative analysis of diastereoisomeric alkanolamines as cyclic boronic acid derivatives (204) 201

Sample application
Semiquantitative determination of trace substances in the ng/g (ppb) range by means of TLC (209) 84

Sample applicator
Sample applicator for granular gel slabs: effect of sample orientation on the sensitivity of detection in isoelectric focusing (206) 132

Sample preparation
Application of column switching in HPLC to on-line sample preparation for complex separations (204) 65

Sample valve
Variable-volume sample valve for HPLC (208) 67

Sampling method
"Direct" (on-column) sampling into glass capillary columns. Comparative investigation on split, splitless and on-column sampling (204) 85

Direct sampling method for GC headspace analysis on glass capillary columns (210) 25

Saponins
Rapid preparative separation of natural products by centrifugal TLC (202) 154

Scintillation radioactivity detector
High-efficiency solid scintillation radioactivity detection for HPLC (208) 1

Sealing method
Inadvertent formation of polynuclear aromatic hydrocarbons by the flame sealing of glass ampules (202) 294

Secalonic acid D
HPLC analysis of the mycotoxin secalonic acid D and its application to biological fluids (208) 17

Second derivative recording
First and second derivative recording of thin-layer chromatograms. Application to the assay of unresolved compounds (204) 51

Secoverine
Simple extraction detector for the LC determination of secoverine in biological samples (205) 77

Secretin
In situ silylation of an octadecylsilyl-silica stationary phase applied to the analysis of peptides, such as secretin and glucagon (207) 421

Sedative drugs
Analytical aspects of barbiturate abuse. Identification of drugs by the effective combination of GLC, HPLC and TLC techniques (204) 275

Determination of barbiturates in mouse tissues by HPLC (205) 401

Sediment analysis
Correlation of crude oils and source rocks in the German Molasse basin. Applicability of chromatographic techniques (204) 481

GC-MS identification of geochemically significant isoalkane hydrocarbons (204) 491

Selectivity
Application of ion-selectivity predictions to the analysis of ion binding by gels (201) 5

Estimation of ion-exchange process limits by selectivity calculations. II. Regeneration curves (201) 35

Effect of hydrogen bonding on the selectivity of anion-exchange equilibria (201) 85

Systematic use of tetrahydrofuran in reversed-phase HPLC. An example of the selectivity benefits of ternary mobile phases (204) 263

LC on silica using mobile phases containing aliphatic carboxylic acids. I. Effects of carboxylic acid chain length on separation efficiency and selectivity (209) 211

Self-diffusion
Self-diffusion of the sodium ion in the monosodium and disodium forms of α- and γ-zirconium phosphate (201) 167

Semiquinone radicals
Integral HPLC-electron spin resonance spectrometer for *in situ* studies of thermal and photochemical free radical reactions. Separation of phenoxy, hydrazyl, nitroxide and silyl-substituted semiquinone radicals (206) 139

Separation efficiency
LC on silica using mobile phases containing aliphatic carboxylic acids. I. Effects of carboxylic acid chain length on separation efficiency and selectivity (209) 211

Separation factors
Linear relationship between the logarithm of the equilibrium constants and the logarithm of the LC separation factors for tautomers obtained in different solvents (202) 187

Separation number
Evaluation of capillary columns by separation number or plate number (207) 291

Serotonin
Chromatographic separation of some biogenic amines on a weakly acidic ion-exchange resin (207) 286

Sesquiterpenes
Analysis of nutmeg oil using chromatographic methods (204) 391

HPLC determination of stress-induced sesquiterpenes of the potato (*Solanum tuberosum*) (210) 365

Sialic acids
GLC and MS of methyl ethers of methyl N-acetyl-N-methyl-β-D-neuraminate methyl glycoside (210) 487

Silanes
1,5-Bis-(*m*-phenoxyphenyl)-1,1,3,3,5,5-hexaphenyltrisiloxane as a stationary phase in high-temperature GC (207) 345

Silanization
Comparison of supports chemically modified by organosilicon compounds for GLC (209) 385

Silanol groups
Silanol groups on silica gel (209) 341

Silanols
Surface silanols in silica-bonded hydrocarbonaceous stationary phases. I. Dual retention mechanism in reversed-phase chromatography (203) 53

Surface silanols in silica-bonded hydrocarbonaceous stationary phases. II. Irregular retention behavior and effect of silanol masking (203) 65

Silica-attached systems
Characterization of silica-attached systems by ^{29}Si and ^{13}C cross-polarization and magic-angle spinning nuclear magnetic resonance (205) 438

Silica gel
HPLC of polar compounds on buffered silica gel (202) 397

Column LC on dynamically modified silica. I (209) 203

Silanol groups on silica gel (209) 341

Silica gels
Determination of surface hydroxyl groups on silanized silica gels for reversed-phase LC (206) 581

Silica packings
Dissolution of silaceous chromatographic packings in various aqueous eluents (206) 27

HPLC on dynamically modified silica. II. Modification of various silica packings with cetyltrimethylammonium bromide (210) 453

Silicate anions
Determination of trimethylsilyl derivatives of silicate anions by GC using a hydrogen flame-ionization detector (205) 49

Siloxane polymers
1,5-Bis-(*m*-phenoxyphenyl)-1,1,3,3,5,5-hexaphenyltrisiloxane as a stationary phase in high-temperature GC (207) 345

Silver ions
Exchange of hydrated and amminated silver(I) ions in synthetic zeolites X, Y and mordenite (201) 93

Separation of silver-copper mixtures by ion-exchange parametric pumping. I. Total reflux separations (201) 329

Sodium dodecylsulphate
Effect of salt concentration on the elution properties of complexes formed between sodium dodecylsulphate and protein polypeptides in high-performance silica gel chromatography (208) 201

Sodium ions
Self-diffusion of the sodium ion in the monosodium and disodium forms of α- and γ-zirconium phosphate (201) 167

Solanine
Fluorodensitometric determination of potato glycoalkaloids on thin-layer chromatograms (210) 121

Solute-solvent interactions
Chiral recognition in GC by diamide-diamide solute-solvent interaction (202) 247

Solute-solvent interactions in ion-pair LC of amines on non-polar bonded phases using 1-pentanol and N,N-dimethyloctylamine as organic modifiers (203) 93

Simple model of LSC involving solute-solvent and solvent-solvent interactions (210) 130

Solute-stationary phase interactions
Properties of untreated and treated glass capillary surfaces and their contribution to solute-stationary phase interaction and film fixation of the stationary liquid (203) 179

Solvent components
Distribution equilibria of solvent components in reversed-phase LC columns and relationship with the mobile phase volume (207) 299

Solvent degassing
Solvent degassing and other factors affecting LC detector stability (204) 115

Solvent-programmed elution
Peak width in solvent-programmed chromatography. I. General description of peak broadening in solvent-programmed elution (204) 77

Solvent purity
Trace impurities in solvents commonly used for GC analysis of environmental samples (206) 279

Solvent segmentation
Solvent segmentation in LC: application to photochemical reaction detectors (205) 229

Solvent-solvent interactions
Simple model of LSC involving solute-solvent and solvent-solvent interactions (210) 130

Somatomedins
Evidence for carrier ampholyte-peptide interactions during somatomedin purification (209) 273

Sorbate
Routine HPLC method for assessing sorbate in tobacco (202) 494

Sorbents
Lanthanide metal chelates as selective complexing sorbents for GC (203) 29

High selectivity and efficiency in clathrate chromatography. Generation of absorption sites in the β-$Ni(NCS)_2$(4-methylpyridine)$_4$ phase by the mobile phase components (204) 23

Acid-washed graphitized carbon black and its application in the separation of some acids (204) 255

Physico-chemical and chromatographic properties of pyrazole-containing polymer sorbents (206) 233

Application of macroporous anion-exchange resins AN-221 and AN-211 as sorbents for GC (206) 239

Determination of surface hydroxyl groups on silanized silica gels for reversed-phase LC (206) 581

Evaluation of the suitability of selected porous polymers for preconcentration of volatile organic compounds (208) 239

Reactive polymers. XL. Study of the internal structure of thermally treated polymeric sorbents based on glycidyl methacrylate copolymers (210) 255

Sorption effect
GC with a vapour mobile phase at the finite concentration of sorbate. I. The sorption effect (202) 21

Sorption processes
Application of GC for investigating slow sorption processes (205) 425

Space charge phenomena
Study of space charge phenomena in d.c. electron-capture detectors (210) 389

Spasmolytic drugs
Simple extraction detector for the LC determination of secoverine in biological samples (205) 77

Spermidine
Simple method for the simultaneous determination of histamine, polyamines and histone H1 (205) 155

Sphingolipids
Preparation of sphingolipid fatty acid methyl esters for determination by GLC (205) 281

Sphingomyelin
Sensitive and highly reproducible quantitative fluorescent TLC visualization technique for lecithin and sphingomyelin (208) 170

Spiro ethers
HPLC of *cis*- and *trans*-en-in-dicyclo ethers (spiro ethers) in *Matricaria chamomilla* L. flowers and in chamomile extracts (209) 110

Spray cell
Generalized chemiluminescence spray cell for LC detection: selective detection using $O_2(^1\Delta_g)$ (209) 251

Spray reagents
Preparation of N-chloro-5-dimethylaminonaphthalene-1-sulphonamide and its application as a fluorescence reagent for the detection of phenylthiohydantoinamino acids (205) 349

Fluorescamine as a tool for amino sugar analysis (207) 445

Sensitive spray reagent for guanine nucleotides (208) 164

Persulphate ion as a reagent for the detection of aromatic compounds containing the NH_2 group using TLC (208) 167

Stainless-steel columns
Application of glass-lined stainless-steel columns in HPLC (209) 310

Stationary liquid
Properties of untreated and treated glass capillary surfaces and their contribution to solute-stationary phase interaction and film fixation of the stationary liquid (203) 179

Stationary phase characterization
Characterization of silica-attached systems by ^{29}Si and ^{13}C cross-polarization and magic-angle spinning nuclear magnetic resonance (205) 438

Stationary phases
Preparation and evaluation of 3-aminopropyltriethoxysilane-treated silica for HPLC of low-

molecular-weight aldehydes as their lutidine derivatives (202) 55

GLC separation of methoxy-substituted quinones on nematic liquid crystals (202) 75

Direct GC resolution of enantiomers on optically active mesophases. V. Model chiral 3-aminopropylmethylsiloxane systems (202) 363

Correlation between GC and IR spectroscopic behaviour in nematic phases (202) 369

Determination of eleven benzodiazepine derivatives in acetonic solution by GC using a nitrogen-specific detector. Comparison of five stationary phases (in French) (202) 473

Lanthanide metal chelates as selective complexing sorbents for GC (203) 29

Surface silanols in silica-bonded hydrocarbonaceous stationary phases. I. Dual retention mechanism in reversed-phase chromatography (203) 53

Surface silanols in silica-bonded hydrocarbonaceous stationary phases. II. Irregular retention behavior and effect of silanol masking (203) 65

Glass capillary columns for GC coated with non-extractable films of cyanosilicone rubbers (203) 217

Reversed-phase LLC of organic acids with a complexing stationary phase containing tri-*n*-octylphosphine oxide (204) 43

Use of Pluronic F68 glass capillary columns for the analysis of essential oil samples (204) 59

Direct resolution of α-amino acid enantiomers by ligand exchange: stereoselection mechanism on silica packings coated with a chiral polymer (204) 185

Evaluation of bonded phases for the HPLC determination of polycyclic aromatic hydrocarbons in effluent waters (204) 469

Liquid crystals as stationary phases in GLC. III. Thermodynamic measurements on decane-dihexyloxyazoxybenzene and decane-diheptyloxyazoxybenzene systems (205) 239

Liquid crystals as stationary phases in GLC. IV. Thermodynamic measurements on benzene-dihexyloxyazoxybenzene, benzene-diheptyloxyazoxybenzene, carbon tetrachloride-dihexyloxyazoxybenzene and carbon tetrachloride-diheptyloxyazoxybenzene systems (205) 251

Mixed retention mechanisms in GLC. III. Determination of the gas-liquid adsorption coefficient for diisopropyl ether on *n*-octadecane (206) 1

Liquid crystals as the stationary phase in GC. IV. Evaluation of the combination of a separation column and an electric field liquid crystal column (206) 223

Liquid crystals. II. Applications of liquid crystals as stationary phases in GLC (206) 361

Gas chromatography of some C_{13}-C_{16} alkylnaphthalenes on Bentone 34, silicone fluid DC 550 and Apiezon L phases (206) 372

High-resolution GC with liquid crystal glass capillaries. I. Separation of hydrocarbon isomers on nematic mesophases (in German) (206) 463

High-resolution GC with liquid crystal glass capillaries. II. Separation of hydrocarbon isomers on smectic A and C modifications (in German) (206) 475

Characterization of reversed-phase HPLC stationary phases by means of pyrolysis-GC (207) 1

GC separation of amino acid, amine and carboxylic acid enantiomers with α-hydroxycarboxylic acid esters as chiral stationary phases (207) 252

Effect of the amount of liquid crystal and type of support on some properties of the liquid crystalline stationary phase-support system (207) 333

1,5-Bis-(*m*-phenoxyphenyl)-1,1,3,3,5,5-hexaphenyltrisiloxane as a stationary phase in high-temperature GC (207) 345

In situ silylation of an octadecylsilyl-silica stationary phase applied to the analysis of peptides, such as secretin and glucagon (207) 421

Evaluation of bonded methylsilicone rubber as a stationary phase for glass capillary columns (208) 231

Selectivity of paraffinic stationary phases for GLC (209) 21

Feasibility study of high-temperature liquid crystals in wall-coated open-tubular columns (209) 87

GC separation of enantiomers of amines and amino alcohols on chiral stationary phases (209) 91

Hydrophobic chromatography with dynamically coated stationary phases. IV. Anionic surfactant effects on alumina (209) 191

Simple relationships concerning mobile and stationary phases in normal- and reversed-phase chromatography (210) 211

Sterigmatocystin
HPLC of the mycotoxin sterigmatocystin and its application to the analysis of mouldy rice for sterigmatocystin (207) 435

Steroid ketoximes
Linear relationship between the logarithm of the equilibrium constants and the logarithm of the LC separation factors for tautomers obtained in different solvents (202) 187

Steroids
Preparation of trimethylsilyl-, triethylsilyl- and *tert.* -butyldimethylsilyl enol ethers of ketosteroids for GC and MS analysis (in German) (202) 483

Determination of natural cholestenone in rat adrenal extracts by HPLC (202) 487

Reversed-phase TLC of steroids. I. Measurement and interpretation of R_M values (in German) (205) 113

HPLC of ecdysteroids and their 3-epi, 3-dehydro and 26-hydroxy derivatives (205) 139

Separation of some estrogens by TLC (205) 223

Analysis of testolactone and its formulations by HPLC (206) 174

Stimulant drugs
Reversed-phase HPLC detection of pemoline in doping control (202) 131

Determination of underivatized CNS-stimulants and methadone in urinary extracts by glass capillary GC (207) 148

Structure-mobility relationships
Bile acids. LXIII. Relationship between the mobility on reversed-phase HPLC and the structure of bile acids (202) 347

Structure-resolution relationships
Structure-resolution relationship. I. The effect of the alkylamide side-chain of aspartyl derivatives on the resolution of amino acid enantiomers (203) 365

Structure-retention index relationships
Assessment of quantitative relationships between Kováts' retention index and chemical structure: prediction for pyrido-pyrimidine derivatives (202) 122

Structure-retention relationships
High-resolution GC with liquid crystal glass capillaries. I. Separation of hydrocarbon isomers on nematic mesophases (in German) (206) 463

High-resolution GC with liquid crystal glass capillaries. II. Separation of hydrocarbon isomers on smectic A and C modifications (in German) (206) 475

Styrene
Single-ion monitoring of styrene in foods by coupled MS-automatic headspace GC (205) 434

Styrene-acrylonitrile copolymers
Gradient adsorption TLC of styrene-acrylonitrile random copolymers (208) 381

Styrene vapour
Recovery of vapours from solid adsorbents (210) 261

Subtractors
Porous hydrochloride and hydrosulphate forms of poly(vinylpyridine) beads as subtractors for amines and alcohols in reaction GC (206) 485

Sucrose
Quantitative GC analysis of sucrose in the presence of sugar oximes using a buffered oximation reagent and glass capillary columns (207) 221

Sugars
see also saccharides and carbohydrates

Automated on-line multi-dimensional HPLC techniques for the clean-up and analysis of water-soluble samples (206) 43

Rapid GC analysis of partially methylated aldoses as trimethylsilylated diethyl dithioacetals (209) 299

Improved sugar separation by HPLC using porous microparticle carbohydrate columns (209) 316

Improved column efficiency in chromatographic analysis of sugars on cation-exchange resins by use of water-triethylamine eluents (210) 279

Sulphonic acids
Separation of sulphonic acids by normal-phase LC using crown ethers in the mobile phase (205) 170

Sulphur
Determination of the total sulphur content in gas oils with a flame photometric detector (204) 153

Sulphur dioxide
GC detection of SO_2, NO_2, amines and halocarbons using an aerosol ionization detector (207) 131

Sulphur heterocyclics
GC investigation of raw wastewater from coal gasification (204) 439

Supports
Graphitized carbon black columns for HPLC (206) 35

Mixed retention mechanisms in GLC. IV. Comparisons of silanized and Carbowax-modified supports (207) 69

Reversed-phase supports for the resolution of large denatured protein fragments (207) 325

Effect of the amount of liquid crystal and type of support on some properties of the liquid crystalline stationary phase-support system (207) 333

Comparison of supports chemically modified by organosilicon compounds for GLC (209) 385

Effects of hydrogen treatment on typical GC supports (210) 133

Applications of immobilised phenylboronic acids as supports for group-specific ligands in the affinity chromatography of enzymes (210) 267

Support surfaces
Properties of untreated and treated glass capillary surfaces and their contribution to solute-stationary phase interaction and film fixation of the stationary liquid (203) 179

Surface hydroxyl groups
Determination of surface hydroxyl groups on silanized silica gels for reversed-phase LC (206) 581

Surface roughening
Preparation of wall-coated glass capillary columns after surface roughening by means of amorphous silica. II. Factors affecting the performance of the columns in GC analyses (203) 227

Surface silanols
Surface silanols in silica-bonded hydrocarbonaceous stationary phases. I. Dual retention mechanism in reversed-phase chromatography (203) 53

Surface silanols in silica-bonded hydrocarbonaceous stationary phases. II. Irregular retention behavior and effect of silanol masking (203) 65

Surfactants
Determination of poly(ethylene glycols) in non-ionic surfactants by preparative HPLC (205) 473

Hydrophobic chromatography with dynamically coated stationary phases. IV. Anionic surfactant effects on alumina (209) 191

HPLC on dynamically modified silica. II. Modification of various silica packings with cetyltrimethylammonium bromide (210) 453

Syringaldehyde
Systematic use of tetrahydrofuran in reversed-phase HPLC. An example of the selectivity benefits of ternary mobile phases (204) 263

T

Tannin
Characteristics of immobilized tannin for protein adsorption (207) 13

Tars
GC investigation of raw wastewater from coal gasification (204) 439

Taurine
Simple assay method using isotachophoresis for taurine in tissues of the rat (202) 504

Taurine levels in cat plasma (209) 479

Tautomer separation
Linear relationship between the logarithm of the equilibrium constants and the logarithm of the LC separation factors for tautomers obtained in different solvents (202) 187

Temperature effects
GC with a vapour mobile phase at the finite concentration of sorbate. II. Temperature effects and the characteristics of preparative separations (202) 29

Teratogenic agents
Simultaneous quantitation of thioureas in rat plasma by HPLC (207) 281

Terpenes
Determination of monoterpene hydrocarbons in the atmosphere (209) 293

Terpenoids
Analysis of nutmeg oil using chromatographic methods (204) 391

Dehydrogenation of terpenoids on chromatoplates (210) 370

Tertiary sulphonium compounds
Estimation of quaternary ammonium and tertiary sulphonium compounds by thin-layer electrophoresis and scanning reflectance densitometry (210) 550

Testolactone
Analysis of testolactone and its formulations by HPLC (206) 174

Testosterone
Preparation of trimethylsilyl-, triethylsilyl- and *tert.* -butyldimethylsilyl enol ethers of ketosteroids for GC and MS analysis (in German) (202) 483

Tetraalkylammonium ions
Gel chromatographic behaviour of tetraalkylammonium ions on Sephadex G-10 (210) 1

Tetraalkyltin compounds
Rapid method for the determination of tetraalkyltin compounds in various kinds of biological material by GC (207) 237

Tetrabutylammonium
Ion-exchange phenomena and concomitant pH shifts on the equilibration of reversed-phase packings with ion-pairing reagents (209) 393

Tetrachlorodibenzodioxin
Determination of 2,3,7,8-tetrachlorodibenzo-*p*-dioxin in goat milk and tissues by glass capillary GC and medium resolution mass fragmentography (208) 323

Tetracyclines
Separation and semi-quantitative determination of tetracycline degradation products in tetracycline hydrochloride powders and capsules by TLC (205) 486

Reversed-phase ion-pair chromatography of tetracyclines on a LiChrosorb NH_2 column (208) 78

Reversed-phase ion-pair LC of tetracyclines (209) 161

Tetrahydroanthraquinone
Determination of 9,10-anthraquinone and a mixture of 9,10-dihydroxy-1,4-dihydroanthracene and 1,4,5,8-tetrahydroanthraquinone in pulping materials by HPLC (206) 392

Tetrahydrocannabinol
Measurement of Δ^1-tetrahydrocannabinol in plasma to the low picogram range by GC-MS using metastable ion detection (202) 83

Post-column derivatization procedure for the colorimetric analysis of tissue cannabinoids separated by HPLC (205) 303

Determination of Δ^9-tetrahydrocannabinol in pharmaceutical vehicles by HPLC (206) 117

Tetrahydrofuran
Systematic use of tetrahydrofuran in reversed-phase HPLC. An example of the selectivity benefits of ternary mobile phases (204) 263

Tetrathionate
Determination of the tetrathionate content of an anion-exchange resin (201) 313

Tetrazolophthalazine
Determination of nitrite in human, cow and market milks by GLC with electron-capture detection (206) 531

Theaflavins
HPLC assay for theaflavins (206) 400

Theophylline
Automated on-line multi-dimensional HPLC techniques for the clean-up and analysis of water-soluble samples (206) 43

Thermal fractionation
Thermal fractionation by moving-bed ion exchange: principles and experiments (201) 343

Thiabendazole
GLC of selected benzimidazole fungicides by flash-heater methylation with trimethylanilinium hydroxide (210) 83

Thiocyanates
Determination of cyanides and thiocyanates in water by headspace GC with a nitrogen-phosphorus detector (207) 47

Thiohydantoins
Separation of isomeric thiohydantoins by TLC (210) 188

Thioureas
Simultaneous quantitation of thioureas in rat plasma by HPLC (207) 281

Thromboxane
Separation of prostaglandins A, B, D, E, F, thromboxane and 6-keto prostaglandin $F_{1\alpha}$ by TLC (209) 334

Titanium dioxide
Models for the adsorption of uranium on titanium dioxide (201) 187

Titanium phosphate
Ion-exchange properties of γ-titanium phosphate and its monosodium forms towards Mg^{2+} and Ca^{2+} ions (201) 175

Tobacco
Routine HPLC method for assessing sorbate in tobacco (202) 494

Tobacco alkaloids
Quantitation of major tobacco alkaloids by HPLC (205) 147

Tobanum
Specific and sensitive method for the determination of Tobanum using GC with electron-capture and mass fragmentographic detection (204) 355

Toluene diisocyanate
Trace analysis of isocyanates in industrial atmospheres using GC and electron-capture detection (208) 313

Toluidines
GC analysis of aromatic amines as N-permethylated derivatives (206) 555

Topological analysis
GSC on cation-exchange resins. DARC topological analysis of the behavior of alkenes on nickel ions (207) 115

Toyopearl columns
Packing of Toyopearl column for gel filtration. I. Influence of packing velocity on column performance (205) 185

Packing of Toyopearl columns for gel filtration. II. Dependence of optimal packing velocity on column size (206) 135

Packing of Toyopearl columns for gel filtration. III. Semi-constant-pressure packing (208) 71

Suitability of TSK-gel Toyopearl packing for the gel permeation chromatographic analysis of dextran (208) 74

Trace analysis
Quantitative trace analysis of polycyclic aromatic hydrocarbons by HPLC and low-temperature fluorimetry in Shpolskii matrices at 4.2°K. Application to medicinal white oils (204) 135

Trace analysis of free amines by GLC (207) 37

Trace analysis of explosives at the low picogram level by silica capillary column GLC with electron-capture detection (208) 83

Trace analysis of isocyanates in industrial atmospheres using GC and electron-capture detection (208) 313

Semiquantitative determination of trace substances in the ng/g (ppb) range by means of TLC (209) 84

Trace impurities
Trace impurities in solvents commonly used for GC analysis of environmental samples (206) 279

Transboronation
Study of the formation of the 2,4-dichlorobenzeneboronate derivative of 1-isopropylaminopropan-2-ol by transboronation (205) 297

Trazodone
Determination of plasma and brain concentrations of trazodone and its metabolite, 1-*m*-chlorophenylpiperazine, by GLC (210) 311

Triadimefon
Determination of triadimefon in grape juice and wine using capillary GC (208) 409

Triazine dyes
Use of triazine dyes in the affinity chromatographic purification of alkaline phosphatase from calf intestine (206) 521

Triazine herbicides
Determination of triazine herbicides in various crops by capillary GC with thermionic detection (202) 431

Triazines
Separation of multi-component mixtures of N-dealkylated degradation products of *s*-triazine herbicides and their parent compounds by glass capillary GLC (205) 464

Determination of cyanuric acid by HPLC (207) 454

Trichlorotriazine
Affinity adsorbent preparation. Chemical features of agarose derivatization with trichloro-*s*-triazine (202) 381

Triethylammonium phosphate
Evaluation of triethylammonium phosphate and formate-acetonitrile mixtures as eluents for high-performance gel permeation chromatography (202) 211

Triglycerides
Improved separation of triglycerides at low temperatures by reversed-phase LC (204) 407

Degradation of triglycerides in GC capillaries: studies by reversing the column (205) 289

HPLC method for quantitation of free acids, mono-, di- and triglycerides using an IR detector (209) 61

Trioctylphosphine oxide
Reversed-phase LLC of organic acids with a complexing stationary phase containing tri-*n*-octylphosphine oxide (204) 43

Triolein
Degradation of triglycerides in GC capillaries: studies by reversing the column (205) 289

Tris(aminoacidato) cobalt chelates
Chromatographic study of optical resolution. VI. Separation of isomers of facial tris(aminoacidato) mixed ligand chelates with *d*-tartrate and antimony *d*-tartrate adsorbed on an anion-exchange resin (210) 477

Tris(ethylhexyl) phosphate
Sample collection and field analysis of tris-(2-ethylhexyl) phosphate used in a study of pesticide spray drift (204) 453

Triterpenes
Rapid preparative separation of natural products by centrifugal TLC (202) 154

Triterpenoids
HPLC of triterpenoids (207) 457

Tröger's base
Simultaneous monitoring of light-absorption and optical activity in the LC of chiral substances (202) 239

Trypsin
Separation of α- and β-trypsin by hydrophobic interaction chromatography (207) 55

Use of biospecific adsorbents with polysaccharide spacers in affinity chromatography (210) 67

Tryptophan
Use of circular dichroism as a HPLC detector (204) 103

GLC of amino acids. The heptafluorobutyryl-isobutyl ester derivative of tryptophan (208) 60

Tuftsin
Analysis of contaminants in commercial preparations of the tetrapeptide tuftsin by HPLC (205) 179

U

Uranium
Models for the adsorption of uranium on titanium dioxide (201) 187

Study of sorption of uranium from pulps of low acidity (201) 371

Uranium ions
Ion-exchange kinetics in systems with non-linear equilibrium isotherms. Sorption of uranium(VI) on strong acid cation exchangers (201) 113

Ureas
Analysis of urea compounds by HPLC (208) 424

Reversed-phase LC. II. Determination of partition coefficients of barbiturates and urea herbicides (209) 7

Urokinase
Isolation of human urine urokinase by column chromatography on sawdust and some properties of the enzyme obtained (210) 180

Uroporphyrin
The chromatographic separation of uroporphyrin I and III octamethyl esters (202) 491

V

Valepotriates
Straight-phase and reversed-phase HPLC separations of valepotriate isomers and homologues (205) 206

Vanillin
Systematic use of tetrahydrofuran in reversed-phase HPLC. An example of the selectivity benefits of ternary mobile phases (204) 263

Vasodilator drugs
Determination of vincamine in human plasma using automated HPLC (204) 335

HPLC determination of vincamine (210) 149

HPLC of nifedipine, its metabolites and photochemical degradation products (210) 516

Venoms
Altered synthesis of carboxylacrylamide which offers improved resolution of venom proteins (206) 368

Isotachophoretic characterization of stinging insect venoms (209) 121

Vicine
Rapid reversed-phase HPLC method for the quantitation of vicine, convicine and related compounds (208) 373

Vincamine
Determination of vincamine in human plasma using automated HPLC (204) 335

HPLC of eburnane alkaloids. I. Separation on reversed phases (204) 341

HPLC of eburnane alkaloids. II. Separations on silica (205) 57

HPLC determination of vincamine (210) 149

Viruses
High-performance size exclusion chromatography of sea worm chlorocruorin and other large proteins, viruses and polysaccharides on a TSK G5000 PW preparative column (210) 443

Visualization technique
Sensitive and highly reproducible quantitative fluorescent TLC visualization technique for lecithin and sphingomyelin (208) 170

Vitamin A
Separation and determination of the *cis-trans* isomers of the vitamin A esters by HPLC (in German) (206) 319

Vitamin B_6
Separation of vitamin B_6 by reversed-phase ion-pair HPLC (202) 134

Vitamin C
HPLC method for the determination of L-ascorbic acid and D-isoascorbic acid (206) 396

Resolution of ascorbic, dehydroascorbic and diketogulonic acids by paired-ion reversed-phase chromatography (207) 449

Vitamin D_3
Separation of functional hydroxymetabolites of vitamin D_3 by TLC (209) 337

Vitamin K
Resolution of menaquinones (vitamin K_2) by HPLC (206) 333

Vitamins
Automated on-line multi-dimensional HPLC techniques for the clean-up and analysis of water-soluble samples (206) 43

Volatilic compounds
Determination of hydrophilic volatiles in gas-aqueous liquid systems by Grob's closed-loop strip/trap method and standard-addition calibration (204) 421

Voltammetric detector
Comparison of several voltammetric detectors for HPLC (208) 269

W

Warfarin
Retention data methods for the determination of drug-protein binding parameters by HPLC (204) 285

Wastewater
GC investigation of raw wastewater from coal gasification (204) 439

Water
GC determination of water: a source of systematic error introduced by interactions of polar compounds on porous polymer GC columns (203) 271

Water protons
Measurement of the relaxation time of water protons in ion exchanger-water systems (201) 79

Water-soluble samples
Automated on-line multi-dimensional HPLC techniques for the clean-up and analysis of water-soluble samples (206) 43

X

XAD-2 resin
Impurities arising from the use of XAD-2 resin for the extraction of organic pollutants in drinking water (208) 89

Xanthones
Rapid preparative separation of natural products by centrifugal TLC (202) 154

Xylidines
GC analysis of aromatic amines as N-permethylated derivatives (206) 555

Z

Zeatin
Analysis of plant hormones using HPLC (208) 124

Zeatin derivatives
Separation of modified bases and ribonucleosides with cytokinin activity using fused silica capillary GC (209) 467

Zeolites
Binary and ternary cation exchange in zeolites (201) 21

Exchange of hydrated and amminated silver(I) ions in synthetic zeolites X, Y and mordenite (201) 93

Sorption of copper(II) ions on the sodium and the calcium form of zeolites (201) 107

Zinc
Separation of metal ions on ion-exchange resin with ethylenediamine functional groups (201) 73

Zinc dithiophosphates
High-voltage paper electrophoresis of zinc dialkyl- and diaryldithiophosphate lubricating oil additives (207) 407

Zinc pyrithione
TLC of pyrithiones (206) 301

Zirconium phosphate
Self-diffusion of the sodium ion in the monosodium and disodium forms of α- and γ-zirconium phosphate (201) 167

Zwitterion-pairing agents
Zwitterion-pair chromatography of nucleotides and related species (203) 85

Zwitterions
Mechanism of ion-pair LC of amines, neutrals, zwitterions and acids using anionic hetaerons (204) 3

PUBLICATION SCHEDULE FOR 1981

Journal of Chromatography (incorporating *Chromatographic Reviews*) and *Journal of Chromatography, Biomedical Applications*

MONTH	N 1980	D 1980	J	F	M	A	M	J	J	A	S	O	N	D
Journal of Chromatography			203 204 205/1 205/2	206/1 206/2 206/3	207/1 207/2 207/3	208/1 208/2 209/1	209/2 209/3 210/1	210/2 210/3 211/1	211/2 211/3 212/1 212/2	212/3 213/1 213/2	213/3 214/1 214/2	214/3 215 216	217 218 219/1	219/2 219/3
Chromatographic Reviews							220/1					220/2		220/3
Biomedical Applications	221/1	221/2	222/1	222/2	222/3	223/1	223/2	224/1	224/2	224/3	225/1	225/2	226/1	226/2

INFORMATION FOR AUTHORS

(Detailed *Instructions to Authors* were published in Vol. 209, No. 3, pp. 501–504. A free reprint can be obtained by application to the publisher)

Types of Contributions. The following types of papers are published in the *Journal of Chromatography* and the section on *Biomedical Applications:* Regular research papers (Full-length papers), Short communications and Notes. Short communications are preliminary announcements of important new developments and will, whenever possible, be published with maximum speed. Notes are usually descriptions of short investigations and reflect the same quality of research as Full-length papers, but should preferably not exceed four printed pages. For reviews, see page 2 of cover under Submission of Papers.

Submission. Every paper must be accompanied by a letter from the senior author, stating that he is submitting the paper for publication in the *Journal of Chromatography*. Please do not send a letter signed by the director of the institute or the professor unless he is one of the authors.

Manuscripts. Manuscripts should be typed in double spacing on consecutively numbered pages of uniform size. The manuscript should be preceded by a sheet of manuscript paper carrying the title of the paper and the name and full postal address of the person to whom the proofs are to be sent. Authors of papers in French or German are requested to supply an English translation of the title of the paper. As a rule, papers should be divided into sections, headed by a caption (e.g., Summary, Introduction, Experimental, Results, Discussion, etc.). All illustrations, photographs, tables, etc. should be on separate sheets.

Introduction. Every paper must have a concise introduction mentioning what has been done before on the topic described, and stating clearly what is new in the paper now submitted.

Summary. Full-length papers and Review articles should have a summary of 50–100 words which clearly and briefly indicates what is new, different and significant. In the case of French or German articles an additional summary in English, headed by an English translation of the title, should also be provided. (Short communications and Notes are published without a summary.)

Illustrations. The figures should be submitted in a form suitable for reproduction, drawn in Indian ink on drawing or tracing paper. Each illustration should have a legend, all the *legends* being typed (with double spacing) together on a *separate sheet*. If structures are given in the text, the original drawings should be supplied. Coloured illustrations are reproduced at the author's expense, the cost being determined by the number of pages and by the number of colours needed. The written permission of the author and publisher must be obtained for the use of any figure already published. Its source must be indicated in the legend.

References. References should be numbered in the order in which they are cited in the text, and listed in numerical sequence on a separate sheet at the end of the article. Please check a recent issue for the lay-out of the reference list. Abbreviations for the titles of journals should follow the system used by *Chemical Abstracts*. Articles not yet published should be given as "in press", "submitted for publication", "in preparation" or "personal communication".

Proofs. One set of proofs will be sent to the author to be carefully checked for printer's errors. Corrections must be restricted to instances in which the proof is at variance with the manuscript. "Extra corrections" will be inserted at the author's expense.

Reprints. Fifty reprints of Full-length papers, Short communications and Notes will be supplied free of charge. Additional reprints can be ordered by the authors. An order form containing price quotations will be sent to the authors together with the proofs of their article.

News. News releases of new products and developments, and information leaflets of meetings should be addressed to: The Editor of the News Section, Journal of Chromatography/Journal of Chromatography, Biomedical Applications, Elsevier Scientific Publishing Company, P.O. Box 330, 1000 AH Amsterdam, The Netherlands.

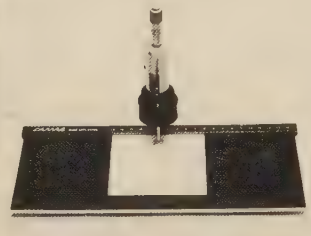
Advertisements. Advertisement rates are available from the publisher on request. The Editors of the journal accept no responsibility for the contents of the advertisements.

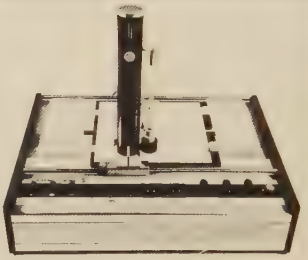
Modern Thin-Layer Chromatography

can only be fully exploited with a complete system of instruments fo sample application, chromatographic development and evaluatio

Here is a complete system for conventional TLC

1. Sample Application





or

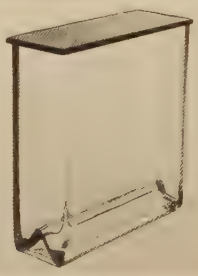
CAMAG Micro-Applicator

variable volume sample application 0.5–2.3 µl (spotwise), reproducibility 1%.

CAMAG LINOMAT III*

application of larger sample volumes (approx. 2–500 µl), in the form of narrow bands, reproducibility 1%.

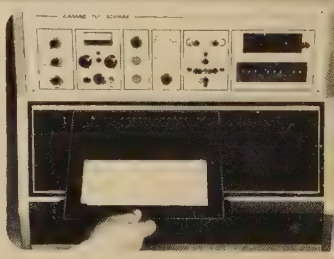
2. Chromatogram Development



CAMAG
Twin-Trough Chamber

versatile,
economical in solvent consumption,
reproducible conditions

3. Quantitative Evaluation



CAMAG TLC/HPTLC Scanner*

Available in two options: low-priced filter version or monochromator equipped.

Scanning modes: absorbance, fluorescence, fluorescence quenching.

Automatic scanning of all tracks of a complete chromatogram, or the selected segment.

Ask for full information on COMPLETE CAMAG SYSTEMS for High-Performance TLC also.

The units marked with an * are, by the way, compatible with HPTLC anyway.

If you are planning to set up a new TLC laboratory, or to complemen your existing TLC equipment, ask the CAMAG specialist. He will help

CAMAG Sonnenmattstr. 11 · CH-4132 Muttenz/Switzerland · Tel. (061) 613434 · Telex 62 6

LIBRARY USE ONLY